DATE IN 4/18/11	SUSPENSE	ENGINEER TW.	LOGGED IN 4/18/11	TYPE WFX	APP NO pTGW 1110853763

ABOVE THIS LINE FOR DIVISION USE ONLY

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

Resaca 263848
Case 14627

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 _____

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[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

Jalmat (33820)
Langlie Mattix (37240)

[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.

Keith B. Masters, P.E.	Keith B. Masters, P.E.	Consultant	04/15/11
Print or Type Name	Signature	Title	Date

k_b_masters@mastersconsultingllc.com
e-mail Address

Masters Consulting, LLC

7500 Rialto Blvd.; Ste. 180
Austin, TX 78735

Keith B. Masters, P.E.
President
email: k_b_masters@mastersconsultingllc.com
Phone: (512) 906-2016
Fax: (512) 906-2729

April 16, 2011

Mr. Terry G. Warnell
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

18245 375 RECEIVED OCD 2011 APR 18 P 1:45

Re: Application for Authority to Inject
Waterflood Expansion (WFX)
Resaca Operating Company
Jalmat & Langlie Mattix Pools
Cooper Jal Unit
Lea County, NM

DHC-4068
4067

Dear Terry:

Resaca Operating Company ("Resaca") hereby requests authority to inject water into the Jalmat and Langlie Mattix Pools through seven wells located within the Cooper Jal Unit ("the Unit"), Lea County, New Mexico. Form C-108 and supporting documents are attached.

R-4019

By Order No. R-4018, dated August 25, 1970, the NMOCD approved the Cooper Jal Unit Agreement. A waterflood project and authority to inject into certain wells in the Langlie Mattix Pool underlying the Unit was approved by NMOCD Order R-4019. A waterflood project and authority to inject into certain wells in the Jalmat Pool underlying the Unit was approved by NMOCD Order R-4020. This authority was expanded by Administrative Orders WFX-648, WFX-657, WFX-671, and WFX-876.

There are currently thirty injection wells and seventy producing wells within the Unit. Many of the injection wells and most of the producing wells are completed in both the Jalmat and Langlie Mattix Pools, and under current operations the Unit is effectively operated as a single waterflood project.

The seven proposed injection wells are all currently temporarily abandoned or plugged and abandoned. Resaca desires to increase injection into both Pools to increase reservoir pressure in preparation for tertiary recovery operations involving injection of carbon dioxide.

Re-entry of the proposed injection wells is currently underway. Accordingly, Resaca respectfully requests that administrative review of this application be expedited to the extent possible.

Thank you for your assistance with regard to this application. Please direct any inquiries regarding this matter to the undersigned.

Sincerely,

Keith B. Masters, P.E.
for Resaca Operating Company

cc: Bureau of Land Management
Resaca Operating Company

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

Case 14677

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Resaca Operating Company

ADDRESS: 1331 Lamar Street, Ste. 1450; Houston, TX 77010

CONTACT PARTY: Keith B. Masters, P.E. PHONE: (512) 906-2016

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

IV. Is this an expansion of an existing project? X Yes ____ No
If yes, give the Division order number authorizing the project: R-4019, R-4020

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. attached

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. attached

VII. Attach data on the proposed operation, including: attached

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

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

IX. Describe the proposed stimulation program, if any. attached

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

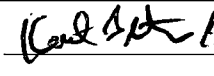
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water. not applicable

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

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: Keith B. Masters, P.E. TITLE: Consultant

SIGNATURE:  DATE: 04/15/11

E-MAIL ADDRESS: k_b_masters@mastersconsultingllc.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Case 4303, Case 4304, WFX-647, WFX-657, WFX-671

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

ATTACHMENT TO FORM C-108
Resaca Operating Co.
Cooper Jal Unit

Item III – Proposed Injection Wells

Wells with existing Injection Authority

CJU # 105	active injector	Jalmat and Langlie Mattix Pools
CJU # 116	active injector	Jalmat and Langlie Mattix Pools
CJU # 118	active injector	Jalmat and Langlie Mattix Pools
CJU # 120	active injector	Jalmat and Langlie Mattix Pools
CJU # 122	active injector	Jalmat and Langlie Mattix Pools
CJU # 124	TA	Langlie Mattix Pool only
CJU # 126	active injector	Jalmat and Langlie Mattix Pools
CJU # 132	active injector	Jalmat and Langlie Mattix Pools
CJU # 133	active injector	Jalmat and Langlie Mattix Pools
CJU # 134	active injector	Jalmat and Langlie Mattix Pools
CJU # 135	active injector	Jalmat and Langlie Mattix Pools
CJU # 145	active injector	Langlie Mattix Pool only
CJU # 146	active injector	Jalmat and Langlie Mattix Pools
CJU # 151	active injector	Langlie Mattix Pool only
CJU # 153	active injector	Jalmat and Langlie Mattix Pools
CJU # 201	active injector	Jalmat Pool Only
CJU # 203	active injector	Jalmat Pool Only
CJU # 205	active injector	Jalmat and Langlie Mattix Pools
CJU # 211	active injector	Jalmat and Langlie Mattix Pools
CJU # 216	active injector	Jalmat Pool Only
CJU # 218	active injector	Jalmat Pool Only
CJU # 220	active injector	Jalmat and Langlie Mattix Pools
CJU # 224	active injector	Jalmat Pool Only
CJU # 226	active injector	Jalmat and Langlie Mattix Pools
CJU # 228	active injector	Jalmat Pool Only
CJU # 234	active injector	Jalmat Pool Only
CJU # 238	active injector	Jalmat Pool Only
CJU # 239	active injector	Jalmat Pool Only
CJU # 241	active injector	Jalmat Pool Only
CJU # 242	active injector	Jalmat Pool Only
CJU # 244	active injector	Jalmat and Langlie Mattix Pools

Cooper Jal Unit Water Flood Project

Wells for which Injection Authority is requested

CJU # 108	P&A	Jalmat and Langlie Mattix Pools
CJU # 109	P&A	Jalmat Pool Only
CJU # 114	P&A	Jalmat and Langlie Mattix Pools
CJU # 148	P&A	Jalmat and Langlie Mattix Pools
CJU # 206	TA	Jalmat Pool Only
CJU # 213	P&A	Jalmat and Langlie Mattix Pools
CJU # 230	P&A	Jalmat Pool Only

ATTACHMENT TO FORM C-108
Resaca Operating Co.
Cooper Jal Unit

PROPOSED WELLBORE SCHEMATICS

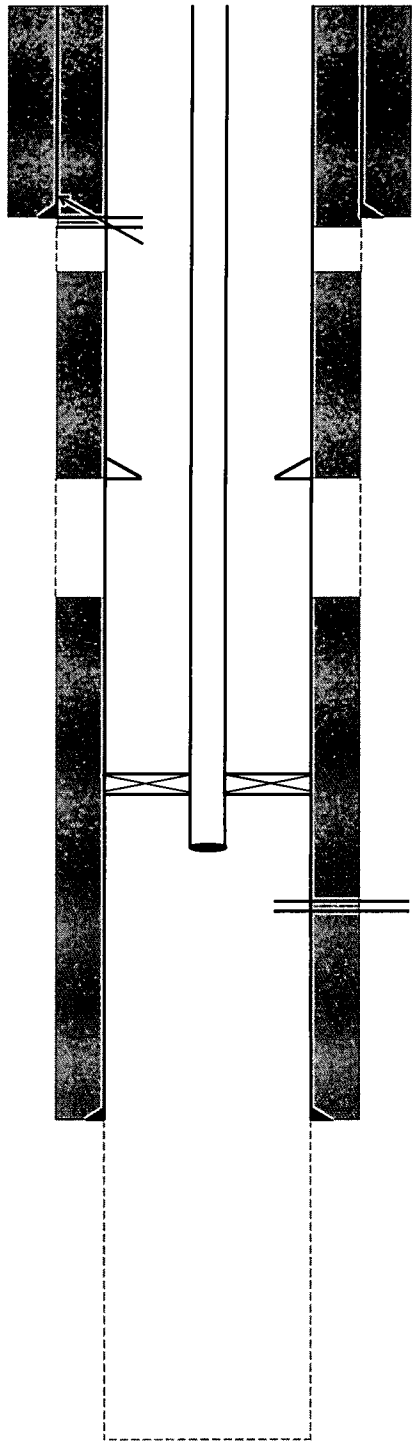
INJECTION WELLS

PROPOSED WELLBORE SCHEMATIC

Operator:	Resaca Operating Co
Well Name:	Cooper Jal #108
Well Location:	
Calls	1980' FSL, 660' FWL
Unit	L
Section	18
Township	24S
Range	37E

sqz 50 sx cmt

perf sqz holes @ 360', circulated to surface



Surface Casing

Hole Size (in):	12 1/4
Casing Size (in):	9 5/8
Casing Weight (ppf).	32
Setting Depth (ft).	304
Amount Cement (sx).	150
Top of Cement (ft):	0
TOC Method	Calculated

DV Tool

Depth (ft).	1225
Amount Cement (sx):	200
Top of Cement (ft)	Unknown
TOC Method	---------

Injection Tubing

Tubing Size (in):	2 3/8
Tubing Weight (ppf)	4.7
Packer Depth (ft).	2950
Setting Depth (ft):	2975

Perforations

Top (ft)	3000
Bottom (ft):	3384

Production Casing

Hole Size (in).	8 3/4
Casing Size (in)	7
Casing Weight (ppf):	20
Setting Depth (ft)	3411
Amount Cement (sx)	200
Top of Cement (ft):	2155
TOC Method:	Calculated

Open Hole

Hole Size (in)	6 1/4
Top (ft):	3411
Bottom (ft):	3750

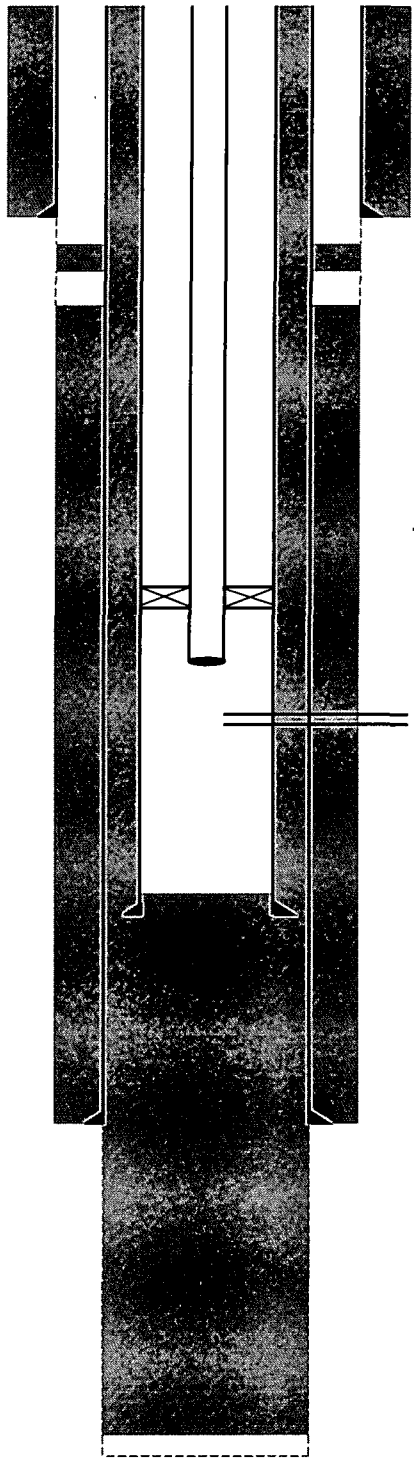
Total Depth (ft): 3750

PROPOSED WELLBORE SCHEMATIC

Operator.	Resaca Operating Co
Well Name·	Cooper Jal #109
Well Location.	
Calls	1980' FSL, 1980' FWL
Unit	K
Section	18
Township	24S
Range	37E

csg leak 539' - 914'

sqz multiple times; 1625 sx cmt total



80 sx cmt plug 2900' - 3515'

(drilled out to 3300')

Surface Casing

Hole Size (in)	12 1/4
Casing Size (in).	8 5/8
Casing Weight (ppf).	24
Setting Depth (ft)·	284
Amount Cement (sx).	150
Top of Cement (ft)·	0
TOC Method·	Calculated

Injection Tubing

Tubing Size (in)	2 3/8
Tubing Weight (ppf)·	4 7
Packer Depth (ft)	2920
Setting Depth (ft)·	2945

Perforations

Top (ft)·	2972
Bottom (ft).	3268

Internal Liner

Casing Size (in).	3 5
Casing Weight (ppf)·	9 3
Setting Depth (ft).	3306
Amount Cement (sx)·	290
Top of Cement (ft).	0
TOC Method	Circulated

Production Casing

Hole Size (in)·	7 7/8
Casing Size (in)	5 1/2
Casing Weight (ppf).	14
Setting Depth (ft).	3345
Amount Cement (sx).	500
Top of Cement (ft)	621
TOC Method.	Calculated

Open Hole

Hole Size (in)·	4 3/4
Top (ft).	3345
Bottom (ft)·	3638

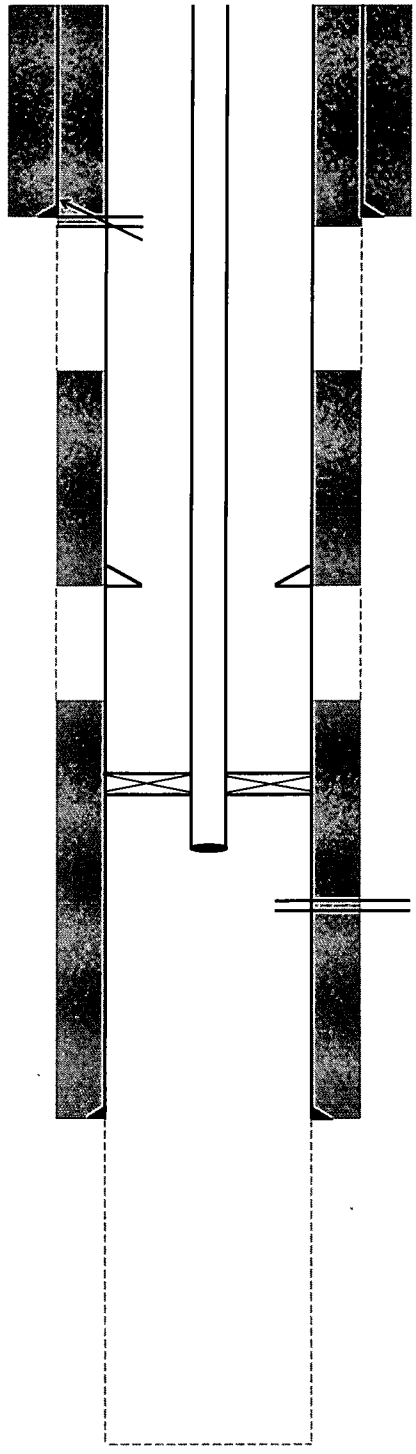
PBTD (ft)·	3300
Total Depth (ft)	3638

PROPOSED WELLBORE SCHEMATIC

Operator	Resaca Operating Co
Well Name.	Cooper Jal #114
Well Location	
Calls	330' FSL, 2310' FEL
Unit	O
Section	13
Township	24S
Range	36E

perf sqz holes @ 350'

sqz 120 sx cmt; circulated to surface



Surface Casing

Hole Size (in)	12 1/2
Casing Size (in)	8 5/8
Casing Weight (ppf)	28
Setting Depth (ft)	285
Amount Cement (sx)	250
Top of Cement (ft)	0
TOC Method.	Circulated

DV Tool

Depth (ft)	1241
Amount Cement (sx)	100
Top of Cement (ft)	696
TOC Method	Calculated

Injection Tubing

Tubing Size (in)	2 3/8
Tubing Weight (ppf)	4.7
Packer Depth (ft)	2925
Setting Depth (ft)	2950

Perforations

Top (ft).	2978
Bottom (ft).	3397

Production Casing

Hole Size (in)	7 7/8
Casing Size (in):	5 1/2
Casing Weight (ppf).	15 5
Setting Depth (ft)	3440
Amount Cement (sx).	200
Top of Cement (ft)	2350
TOC Method	Calculated

Open Hole

Hole Size (in).	4 3/4
Top (ft):	3440
Bottom (ft)	3540

Total Depth (ft). 3540

PROPOSED WELLBORE SCHEMATIC

Operator	Resaca Operating Co
Well Name	Cooper Jal #148
Well Location	
Calls	2310' FSL, 2310' FEL
Unit	J
Section	24
Township	24S
Range	36E

csg leak @ 170' -260'

perf sqz holes @ 260'

sqz 250 sx cmt, circulated to surface

perf sqz holes @ 400'

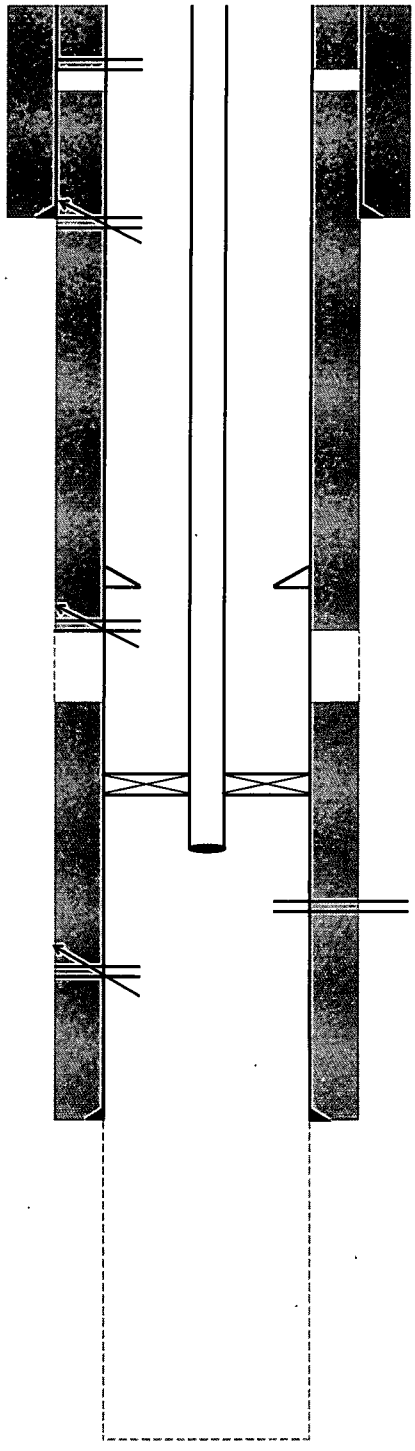
sqz 150 sx cmt

perf sqz holes @ 1400'

sqz 50 sx cmt

prior perforations 3222' - 3306'

sqz 250 sx cmt



Surface Casing

Hole Size (in)	11
Casing Size (in)	8 5/8
Casing Weight (ppf)	28
Setting Depth (ft)	285
Amount Cement (sx)	125
Top of Cement (ft)	0
TOC Method	Circulated

DV Tool

Depth (ft)	1209
Amount Cement (sx)	150
Top of Cement (ft)	391
TOC Method	Calculated

Injection Tubing

Tubing Size (in)	2 3/8
Tubing Weight (ppf)	4 7
Packer Depth (ft)	2970
Setting Depth (ft)	2995

Perforations

Top (ft)	3018
Bottom (ft)	3442

Production Casing

Hole Size (in)	7 7/8
Casing Size (in)	5 1/2
Casing Weight (ppf)	15.5
Setting Depth (ft)	3465
Amount Cement (sx)	150
Top of Cement (ft)	2648
TOC Method	Calculated

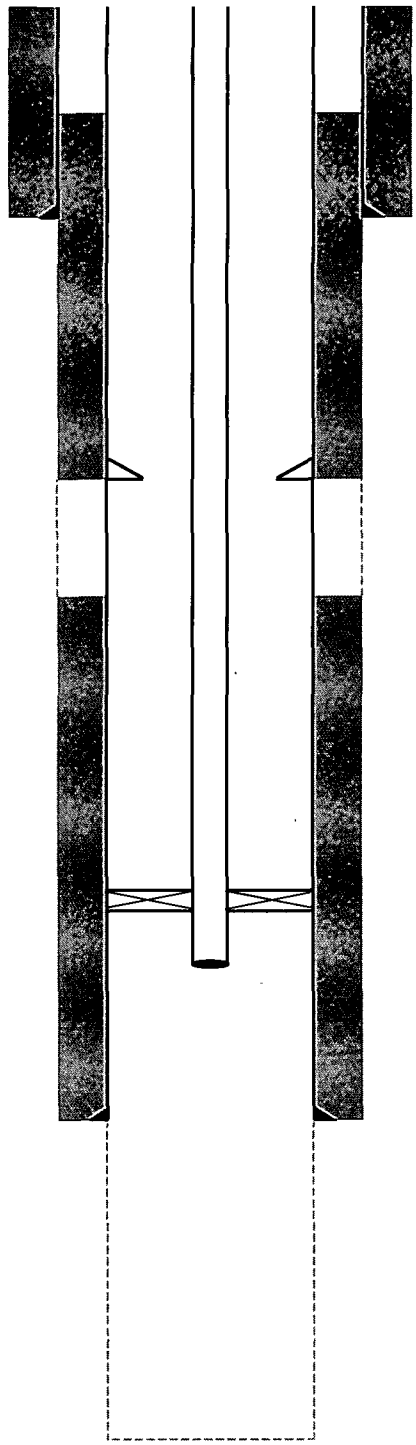
Open Hole

Hole Size (in)	4 3/4
Top (ft)	3465
Bottom (ft)	3720

Total Depth (ft) 3720

PROPOSED WELLBORE SCHEMATIC

Operator:	Resaca Operating Co
Well Name.	Cooper Jal #206
Well Location:	
Calls	1980' FNL, 330' FEL
Unit	H
Section	24
Township	24S
Range	36E



Surface Casing

Hole Size (in).	11
Casing Size (in):	8 5/8
Casing Weight (ppf).	28
Setting Depth (ft):	310
Amount Cement (sx).	125
Top of Cement (ft).	0
TOC Method.	Circulated

DV Tool

Depth (ft):	1228
Amount Cement (sx).	200
Top of Cement (ft):	202
TOC Method.	Calculated

Injection Tubing

Tubing Size (in):	2 3/8
Tubing Weight (ppf)	4 7
Packer Depth (ft)	2930
Setting Depth (ft)	2955

Production Casing

Hole Size (in):	8
Casing Size (in)	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft)	2983
Amount Cement (sx)	200
Top of Cement (ft)	1957
TOC Method.	Calculated

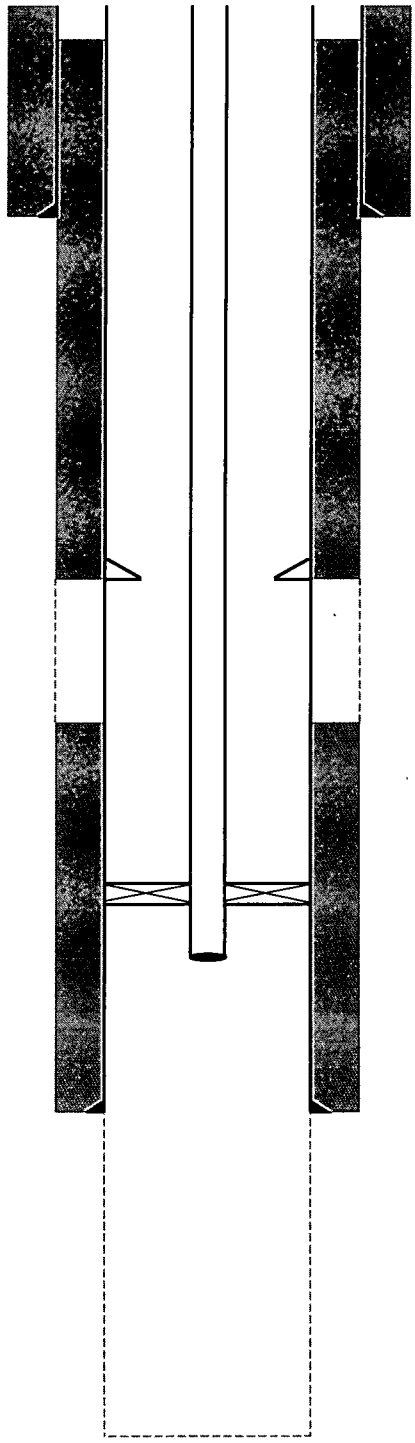
Open Hole

Hole Size (in):	4 3/4
Top (ft)	2983
Bottom (ft):	3230

Total Depth (ft) 3230

PROPOSED WELLBORE SCHEMATIC

Operator.	Resaca Operating Co
Well Name.	Cooper Jal #213
Well Location·	
Calls	1980' FSL, 660' FEL
Unit	I
Section	24
Township	24S
Range	36E



Surface Casing

Hole Size (in)·	11 *
Casing Size (in)·	8 5/8
Casing Weight (ppf)	32
Setting Depth (ft)	302
Amount Cement (sx)	125
Top of Cement (ft)	0
TOC Method.	Circulated

DV Tool

Depth (ft)	1187
Amount Cement (sx)·	200
Top of Cement (ft)	161
TOC Method	Calculated

Injection Tubing

Tubing Size (in).	2 3/8
Tubing Weight (ppf)·	4 7
Packer Depth (ft)	2945
Setting Depth (ft)·	2970

Production Casing

Hole Size (in).	8 *
Casing Size (in)	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft)·	2995
Amount Cement (sx)	200
Top of Cement (ft)	1969
TOC Method.	Calculated

Open Hole

Hole Size (in)	4 3/4
Top (ft).	2995
Bottom (ft).	3730

Total Depth (ft)· 3730

* - assumed

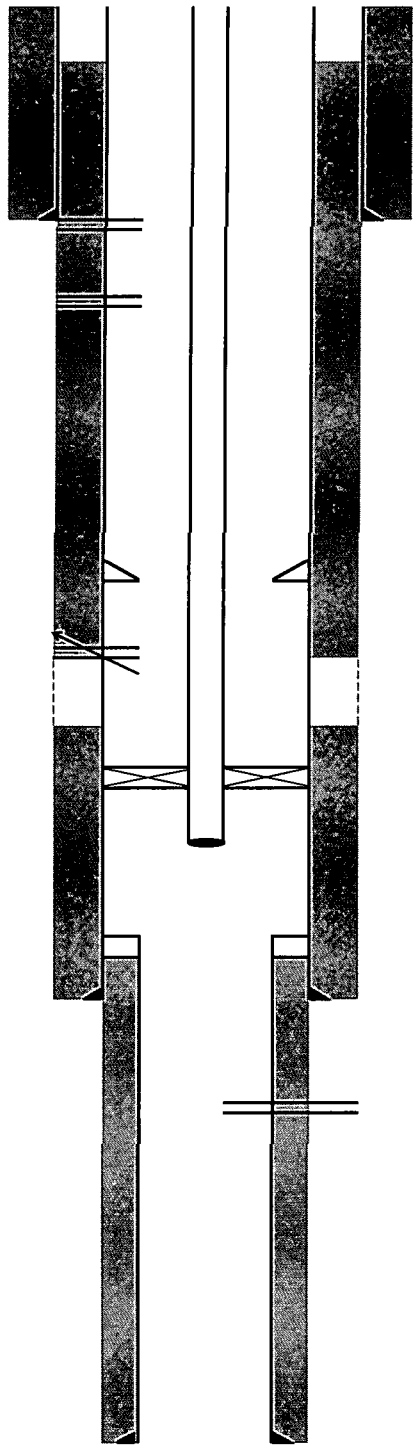
PROPOSED WELLBORE SCHEMATIC

Operator.	Resaca Operating Co.
Well Name.	Cooper Jal #230
Well Location·	
Calls	1650' FNL, 2310' FWL
Unit	F
Section	25
Township	24S
Range	36E

perf sqz holes @ 375'
could not pump in

perf sqz holes @ 400'
could not pump in

perf sqz holes @ 1300'
sqz 50 sx cmt



Surface Casing

Hole Size (in)	13 3/4
Casing Size (in)	10 3/4
Casing Weight (ppf)	40
Setting Depth (ft)·	275
Amount Cement (sx)·	100
Top of Cement (ft)	0
TOC Method	Circulated

DV Tool

Depth (ft)	1208
Amount Cement (sx):	200
Top of Cement (ft):	182
TOC Method.	Calculated

Injection Tubing

Tubing Size (in)·	2 3/8
Tubing Weight (ppf)	4 7
Packer Depth (ft)	2915
Setting Depth (ft)	2940

Production Casing

Hole Size (in)	8
Casing Size (in)	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft)·	2946
Amount Cement (sx)	200
Top of Cement (ft)·	1920
TOC Method.	Calculated

Perforations

Top (ft)	2976
Bottom (ft)·	3195

Liner

Casing Size (in)	4
Casing Weight (ppf).	Unknown
Liner Top (ft)·	2900
Liner Bottom (ft).	3226
Amount Cement (sx)	420
Top of Cement (ft)	2900
TOC Method	Circulated

Total Depth (ft). 3226

ATTACHMENT TO FORM C-108

Resaca Operating Co.

Cooper Jal Unit

Item VI - area of review well data

API Suffix	Section	Unit	Location		Operator	Original Well Name	Current Well Name	Surface Casing Hole Size (in)	Surface Casing Casing Size (in)	Surface Casing Casing Weight (ppf)	Surface Casing Setting Depth (ft)	Surface Casing Amount Cement (sx)	Surface Casing 0.20 1.18 TOC	Surface Casing TOC Method	Production / Intermediate Casing Hole Size (in)	Production / Intermediate Casing Casing Size (in)	Production / Intermediate Casing Casing Weight (ppf)	Production / Intermediate Casing Setting Depth (ft)	Production / Intermediate Casing Amount Cement (sx)	Production / Intermediate Casing 0.20 1.18 TOC	Production / Intermediate Casing TOC Method	Production Casing / Internal Liner Date Set	Production Casing / Internal Liner Casing Size (in)	Production Casing / Internal Liner Casing Weight (ppf)	Production Casing / Internal Liner Setting Depth (ft)	Production Casing / Internal Liner Amount Cement (sx)	Production Casing / Internal Liner 0.00 1.18 TOC	Production Casing / Internal Liner TOC Method	Original Completion Date	Conversion Date	Current Completion Date	Current Perforations or Open Hole Top	Current Perforations or Open Hole Bottom	Prior Perforations or Open Hole Top	Prior Perforations or Open Hole Bottom	Perforations or Open Hole Abandoned Prior to Plugging Date Abnd	Abandoned Top	Abandoned Bottom	Abandoned Method	Abandoned Depth	Abandoned Amount Cement (sx or ft)	Plugback Depth (ft)	Total Depth (ft)	Plugging Date	Status Current	Status Proposed
11145	18	C	660 FNL	1980 FWL	Resaca Operating Co.	Bates #1	Cooper Jal #101	17.000	13.000	40.0	251	250	0	calc	12.000	9.625	47.0	2822	508	1110	calc	11/15/41	7.0	28.0	3440	100	2655	calc	11/20/41	04/21/76	06/04/96	2900	3166	---	---	05/17/96	3440	3572	CIBP	3300	35'	3265	3572	---	Prod	Prod
11138	18	E	1980 FNL	660 FWL	Texaco E&P, Inc.	Bates #1	Cooper Jal #104	13.000	8.625	28.0	291	125	0	circ	8.000	5.000	12.0	3510	125 *	2955	calc	---	---	---	---	---	---	---	07/02/50	08/06/71	---	---	---	3015	3655	---	---	---	---	---	---	0	3655	03/08/00	P&A	P&A
11147	18	F	1980 FNL	1980 FWL	Resaca Operating Co.	Bates #3	Cooper Jal #105	11.000	8.625	32.0	1252	550	0	calc	7.875	5.500	17.0	3468	250	2410	TS	08/25/07	3.5	9.2	3353	120	70	TS	07/12/46	06/06/07	08/27/07	3369	3733	3468	3733	08/25/07	3312	3318	LINER	---	---	3733	3733	---	Inj	Inj
09558	13	K	1650 FSL	1980 FWL	Resaca Operating Co.	Hunter #5	Cooper Jal #107	11.000	8.625	28.0	252	200	0	circ	7.875	5.500	15.5	3426	200	2336	calc	---	---	---	---	---	---	---	03/26/52	02/20/73	11/10/94	3070	3120	3405	3415	11/02/94	3426	3611	CIBP	3302	35'	3267	3611	---	Prod	Prod
11142	18	L	1980 FSL	660 FWL	Resaca Operating Co.	Jack #2	Cooper Jal #108	12.250	9.625	32.0	304	150	0	calc	8.750	7.000	20.0	3411	200 *	2155	calc	---	---	---	---	---	---	---	03/01/50	---	---	---	---	3000	3197	04/23/96	3411	3640	CIBP	3350	35'	0	3640	07/28/00	P&A	Inj
11133	18	K	1980 FSL	1980 FWL	Resaca Operating Co.	Jack #1	Cooper Jal #109	12.250 x	8.625	24.0	284	150	0	calc	7.875 x	5.500	14.0	3345	500	621	calc	10/02/86	3.5	9.3	3306	290	0	circ	10/26/48	09/24/71	---	---	---	3345	3638	---	---	---	---	---	---	0	3638	07/26/00	P&A	Inj
11143	18	I	1980 FSL	660 FEL	Resaca Operating Co.	Russell #1-A	Cooper Jal #110	11.250	8.625	32.0	1200	700	0	circ	8.000	5.500	14.0	3450	250	2168	calc	08/02/05	4.0	---	3766	0	---	---	09/19/46	02/20/73	09/28/96	2994	3770	3450	3587	---	---	---	---	---	---	3728	3770	---	Prod	Prod
09557	13	M	330 FSL	990 FWL	Texaco E&P, Inc.	Hunter #3	Cooper Jal #112	11.000	8.625	28.0	250	100	0	circ	8.000	5.500	14.0	3442	200	2416	calc	---	---	---	---	---	---	---	02/19/52	07/20/71	---	---	---	3000	3617	---	---	---	---	---	---	0	3617	02/15/01	P&A	P&A
09496	13	N	330 FSL	2310 FWL	Resaca Operating Co.	Hunter #2	Cooper Jal #113	13.000	10.750	40.0	233	125	0	circ	8.250	7.000	17.0	3215	200	1399	calc	11/25/51	5.5	14.0	3436	150	2406	circ	12/02/51	---	05/26/94	3001	3615	---	---	---	---	---	---	---	---	3615	3615	---	Prod	Prod
09559	13	O	330 FSL	2310 FEL	Resaca Operating Co.	Maggie Dunn #4	Cooper Jal #114	12.500	8.625	28.0	285	250	0	circ	7.875	5.500	15.5	3440	200 *	2350	calc	---	---	---	---	---	---	---	09/21/54	07/29/71	---	---	---	3440	3526	---	---	---	---	---	---	0	3526	03/23/01	P&A	Inj
09566	13	P	900 FSL	990 FEL	Resaca Operating Co.	Dunn #1	Cooper Jal #115	12.250	9.625	36.0	1195	550	0	circ	8.750	7.000	20.0	3015	300	1131	calc	04/23/75	4.5	10.5	3668	750	2942	sqz	05/12/47	---	06/27/95	3100	3153	3015	3505	06/27/95	3221	3518	CIBP	3200	20'	3180	3668	---	Prod	Prod
11141	18	M	660 FSL	660 FWL	Resaca Operating Co.	Jack #1	Cooper Jal #116	12.250	9.625	40.0	243	150	0	circ	8.625	7.000	20.0	3410	500	1201	TS	---	---	---	---	---	---	---	03/01/50	09/23/71	09/23/71	2980	3641	3410	3641	---	---	---	---	---	---	3641	3641	---	Inj	Inj
11140	18	N	660 FSL	1980 FWL	Resaca Operating Co.	Jack #2	Cooper Jal #117	12.250	8.625	24.0	320	150	0	circ	7.875	5.500	14.0	3350	500	626	calc	---	---	---	---	---	---	---	11/23/48	---	04/04/05	2950	3660	3058	3648	---	---	---	---	---	---	3660	3660	---	Prod	Prod
11139	18	O	660 FSL	1980 FEL	Resaca Operating Co.	Bates #1	Cooper Jal #118	11.000	8.625	32.0	1148	500	0	circ	7.875	5.500	15.5	3474	250	2112	calc	11/09/07	3.5	9.2	3384	140	0	circ	09/28/46	09/08/71	06/03/08	2970	3628	3465	3628	---	---	---	---	---	---	3628	3628	---	Inj	Inj
09631	24	C	660 FNL	1980 FWL	Resaca Operating Co.	Hunter #4	Cooper Jal #120	11.000	8.625	29.8	315	150	0	circ	7.875	5.500	15.5	3000	650	294	TS	12/13/54	4.0	9.5	3604	45	2854	circ	11/10/51	10/07/71	06/01/94	3011	3516	3000	3195	---	---	---	---	---	---	3574	3604	---	Inj	Inj
09645	24	B	990 FNL	1650 FEL	Resaca Operating Co.	Dunn #2	Cooper Jal #121	12.500	9.625	32.3	1174	550	0	circ	8.750	7.000	20.0	3017	350	819	calc	01/25/75	4.5	10.5	3560	700	2966	sqz	02/15/49	---	05/03/05	3018	3760	---	---	---	---	---	---	---	---	3760	3760	---	Prod	Prod
09638	24	A	330 FNL	990 FEL	Resaca Operating Co.	Dunn #6	Cooper Jal #122	12.250	8.625	24.0	280	152	0	circ	7.875	5.500	14.0	3465	200 *	2375	calc	---	---	---	---	---	---	---	06/17/54	05/17/71	09/02/03	3020	3552	3465	3552	---	---	---	---	---	---	3552	3552	---	Inj	Inj
11150	19	D	330 FNL	990 FWL	Resaca Operating Co.	Jack #5	Cooper Jal #123	12.500	9.625	36.0	290	150	0	calc	7.875	5.500	17.0	3342	250 *	1980	calc	---	---	---	---	---	---	---	05/03/52	---	---	---	---	2996	3650	---	---	---	---	---	---	0	3650	02/05/01	P&A	Prod
11153	19	C	660 FNL	1917 FWL	Resaca Operating Co.	Jack #8	Cooper Jal #124	12.250	9.625	36.0	308	175	0	circ	7.875	5.500	15.5	3528	200 *	2438	calc	---	---	---	---	---	---	---	03/09/56	07/22/71	---	---	---	---	---	04/06/99	3380	3482	CIBP	3260	35'	3225	3530	---	TA	Prod
09632	24	F	1650 FNL	2310 FWL	Resaca Operating Co.	Edna E. Hunter #5	Cooper Jal #125	11.000	8.625	24.0	1184	375	0	circ	7.875	5.500	14.0	3653	680	0	circ	---	---	---	---	---	---	---	09/05/54	---	06/26/87	3035	3622	3530	3622	---	---	---	---	---	---	3582	3655	---	Prod	Prod
09636	24	G	1650 FNL	2310 FEL	Resaca Operating Co.	Dunn #4	Cooper Jal #126	11.000	8.625	24.0	280	125	0	circ	7.875	5.500	14.0	3470	200 *	2380	calc	03/04/08	3.5	9.5	3400	240	24	CBL	05/14/54	12/21/93	03/04/08	3021	3548	3470	3560	---	---	---	---	---	---	3548	3560	---	Inj	Inj
09637	24	H	1650 FNL	990 FEL	Resaca Operating Co.	Dunn #5	Cooper Jal #127	11.000	8.625	24.0	290	150	0	circ	7.875	5.500	14.0	3460	200 *	2370	calc	---	---	---	---	---	---	---	05/29/54	08/25/71	10/28/93	3019	3229	3460	3541	10/28/93	3460	3541	CIBP	3389	35'	3354	3541	---	Prod	Prod
11151	19	E	1650 FNL	330 FWL	Resaca Operating Co.	Jack #6	Cooper Jal #128	11.000	8.625	24.0	1230	400	0	circ	7.875	5.500	15.5	3400	200	2310	calc	---	---	---	---	---	---	---	08/22/54	---	01/13/05	3020	3790	3023	3675	---	---	---	---	---	---	3790	3790	---	Prod	Prod
11152	19	F	1650 FNL	1587 FWL	Resaca Operating Co.	Jack #7	Cooper Jal #129	11.000 x	8.625	24.0 x	330	175	0	calc	7.875 x	5.500	15.5 x	3336	200 *	2246	calc	---	---	---	---	---	---	---	09/11/54	---	---	---	---	3018	3670	---	---	---	---	---	---	0	3670	03/13/01	P&A	Prod
09643	24	K	1650 FSL	1650 FWL	Resaca Operating Co.	Thomas #7	Cooper Jal #130	11.000	8.625	28.0	280	125	0	circ	7.875	5.500	14.0	3468	200 *	2378	calc	---	---	---	---	---	---	---	04/22/54	05/17/71	07/05/05	3046	3790	3046	3562	---	---	---	---	---	---	3790	3790	---	Prod	Prod
09639	24	I	2310 FSL	990 FEL	Resaca Operating Co.	Phillips Federal #3	Cooper Jal #132	11.000	8.625	24.0	283	125	0	circ	7.875	5.500	14.0	3475	200 *	2700	CBL	---	---	---	---	---	---	---	05/13/54	11/30/93	01/28/09	3024	3640	3475	3640	---	---	---	---	---	---	3640	3640	---	Inj	Inj
11161	19	K	1980 FSL	1916 FWL	Resaca Operating Co.	A. G. Falby #3	Cooper Jal #133	11.000	8.625	32.0	315	175	0	circ	7.375	5.500	15.5	3320	1000	225	TS	---	---	---	---	---	---	---	10/16/49	09/09/71	04/21/94	2982	3680	3053	3680	---	---	---	---	---	---	3680	3680	---	Inj	Inj
09644	24	N	330 FSL	1650 FWL	Resaca Operating Co.	Thomas #8	Cooper Jal #134	12.250	8.625	24.0	280	150	0	circ	7.875	5.500	14.0	3463	200 *	2373	calc	---	---	---	---	---	---	---	07/21/54	02/10/95	02/10/95	3031	3570	3463	3570	---	---	---	---	---	---	3570	3570	---	Inj	Inj
09641	24	O	990 FSL	1980 FEL	Resaca Operating Co.	Thomas #5	Cooper Jal #135	11.000	8.625	24.0	288	125	0	circ	7.375	5.500	14.0	3472	150 *	2397	calc	---	---	---	---	---	---	---	02/28/54	02/04/95	02/04/95	3019	3650	3472	3575	---	---	---	---	---	---	3650	3650	---	Inj	Inj
09640	24	P	990 FSL	990 FEL	Resaca Operating Co.	Phillips Federal #4	Cooper Jal #136	11.000	8.625	24.0	286	125	0	circ	7.875	5.500	14.0	3465	200 *	2375	calc	---	---	---	---	---	---	---	05/08/54	05/17/71	12/31/09	3013	3314	3465	3540	01/06/94	3465	3540	CIBP	3380	35'	3345	3540	---	Prod	Prod
09660	25	D	990 FNL	330 FWL	Texaco E&P, Inc.	Harrison #8	Cooper Jal #137	12.250	8.625	24.0	289	150	0	circ	7.875	5.500	15.5	3463	200 *	2373	calc	---	---	---	---	---	---	---	07/24/54	07/05/71	---	---	---	3219	3560	---	---	---	---	---	---	0	3560	04/25/00	P&A	P&A
09657	25	C	840 FNL	1650 FWL	Resaca Operating Co.	Harrison #5	Cooper Jal #138	12.250	8.625	24.0	288	150	0	circ	7.875	5.500	14.0	3450	200 *	2360	calc	---	---	---	---	---	---	---	07/01/54	---	03/29/10	3022	3635	3450	3635	---	---	---	---	---	---	3635	3635	---	Prod	Prod
09661	25	B	330 FNL	2310 FEL	Resaca Operating Co.	Van Zandt #5	Cooper Jal #139	11.000	8.625	24.0	286	125	0	circ	7.875	5.500	14.0	3465	200 *	2375	calc	---	---	---	---	---	---	---	07/25/54	06/15/71	10/28/93	3014	3222	3465	3545	10/28/93	3465	3545	CIBP	3355	35'	3320	3545	---	Prod	Prod
09662	25	A	990 FNL	990 FEL	Resaca Operating Co.	Van Zandt #6	Cooper Jal #140	12.250	8.625	24.0	286	150	0	circ	7.875	5.500	14.0	3420	200 *	2330	calc	---	---	---	---	---	---	---	06/13/54	---	04/08/87	2989	3615	3420	3615	---	---	---	---	---	---	3615	3615	---	Prod	Prod
11292	30	D	330 FNL	330 FWL	Resaca Operating Co.	c.c. Fristoe (b) NCT-3	Cooper Jal #141	11.000	8.625	24.0	1140	700	0	circ	7.875	5.500	14.0	3410	400	2240	TS	---	---	---	---	---	---	---	09/13/55	08/18/71	12/21/93	2980	3146	3410	3535	12/21/93	3410	3535	CIBP	3370	35'	3335	3535	---	Prod	Prod
09658	25	F	2310 FSL	1650 FWL	Texaco E&P, Inc.	Harrison #6	Cooper Jal #143	12.250	8.625	24.0	280	150	0	circ	7.875	5.500	14.0	3450	200 *	2570	CBL	---	---	---	---	---	---	---	07/06/54	07/16/71	---	---	---	2996	3205	09/13/95	3450	3550	CIBP	3350	10'	0	3550	03/05/01	P&A	P&A
09663	25	H	2310 FNL	990 FEL	Texaco E&P, Inc.	Van Zandt #7	Cooper Jal #144	12.250	8.625	24.0	286	225	0	circ	7.875	5.500	14.0	3389	200 *	2299	calc	---	---	---	---	---	---	---	06/24/54	06/18/71	---	---	---	3389	3490	---	---	---	---	---	---	0	3490	03/16/87	P&A	P&A
11136	18	G	1980 FNL	1980 FEL	Resaca Operating Co.	Gutman #1	Cooper Jal #145	11.000	8.625	28.0	1253	250	325	calc	7.875	5.500	14.0	3448	200	2358	calc	08/13/07	3.5	9.2	3418	120	1350	TS	03/25/46	08/06/71	08/06/71	3334	3591	2948	3591	---	---	---	---	---	---	3572	3591	---	Inj	Inj
09560	13	I	1650 FSL	990 FEL	Resaca Operating Co.	Maggie Dunn #2	Cooper Jal #146	11.000	8.625	28.0	297	125	0	circ	8.000	5.500	15.5	3033	200 *	2007	calc	09/21/71	4.0	11.0	3642	90	2980	circ	06/11/50	09/21/71	06/21/94	3008	3628	3033	3225	---	---	---	---	---	---	3639	3642	---	Inj	Inj
11166	19	E	2310 FNL	330 FWL	Resaca Operating Co.	Jack B #2	Cooper Jal #147	10.750	9.625	32.0	267	75	0	circ	8.750	7.000	20.0	2975	400	463	calc	10/08/71	4.5	9.5	3485	280	2916	circ	04/15/50	10/08/71	---	---	---	3006	3576	10/08/71	2975	3006	LNR	3485	---	0	3576	03/31/01	P&A	Prod
09642	24	J	2310 FSL	2310 FEL	Resaca Operating Co.	Thomas #6	Cooper Jal #148	11.000	8.625	28.0	285	125	0	circ	7.875	5.500	15.5	3465	150 *	2648	calc	---	---	---	---	---	---	---	03/31/54	07/01/71	---	---	---	3018	3550	02/23/86	3222	3306	SQZ	---	250	0	3550	03/22/01	P&A	Inj
11159	19	L	1650 FSL	990 FWL	Resaca Operating Co.	A. G. Falby #1	Cooper Jal #150	12.250	8.625	32.0	314	175	0	circ	7.875	5.500	15.5	3350	450	2126	TS	---	---	---	---	---	---	---	12/22/48	---	06/14/99	2995	3714	3085	3190	---	---	---	---	---	---	3714	3824	---	Prod	Prod
25682	24	A	771 FNL	170 FEL	Resaca Operating Co.	Cooper Jal #151	Cooper Jal #151	12.250	8.625	24.0	373	275	0	circ	7.875	5.500	15.5	3644	525 *	783	calc	---	---	---	---	---	---	---	11/10/77	11/30/93	11/30/93	3296	3608	---	---	---	---	---	---	---	---	3627	3650	---	Inj	Inj
09627	24	D	660 FNL	660 FWL	Resaca Operating Co.	Edna E. Hunter #1	Cooper Jal #152	17.500	12.500	50.0	264	200	0	circ	12.250	9.625	36.0	1386	550	0	circ	12/17/35	7.0	20.0	3551	150	2374	calc	01/10/36	---	12/16/08	2900	3757	---	---	---	---	---	---	---	---	3771	3771	---	Prod	Prod
26128	19	L	1400 FSL	280 FWL	Resaca Operating Co.	Cooper Jal #153	Cooper Jal #153	12.250	8.625	24.0	368	250	0	circ	7.875	5.500	15.5	3711	1000	0	circ	---	---	---	---	---	---	---	01/27/79	10/27/95	10/27/95	3003	3229	---	---	10/27/95	3278	3696	CIBP	3260	15'	3252	3711	---	Inj	Inj
26284	25	G	1550 FNL	2400 FEL	Resaca Operating Co.	Cooper Jal #154	Cooper Jal #154	12.250	8.625	24.0	365	300	0	circ	7.875	5.500	15.5	3642	600	0	circ	---	---	---	---	---	---	---	05/11/79	---	07/09/99	2976	3094	3246	3570	06/29/99	3246	3570	CIBP	3200	35'	3195	3655	---	Prod	Prod
09628	24	A	660 FNL	330 FEL	Resaca Operating Co.	Maggie Dunn #3	Cooper Jal #201	11.000	8.625	28.0	285	125	0	circ	8.000	5.500	14.0	2994	200 *	1968	calc	---	---	---	---	---	---	---	05/13/50	09/21/71	09/27/71	2994	3237	---	---	---	---	---	---	---	---	3237	3237	---	Inj	Inj
11148	19	D	990 FNL	330 FWL	Resaca Operating Co.	Jack D #3	Cooper Jal #202	12.500	10.750	32.0	268	75	0	circ	8.750	7.000	20.0	2972	200 *	1716	calc	---	---	---	---	---	---	---	05/23/50	---	02/05/05	2972	3790	2972	3224	---	---	---	---	---	---	3790	3790	---	Prod	Prod
09630	24	E	1980 FNL	760 FWL	Resaca Operating Co.	Edna E. Hunter #3	Cooper Jal #203	11.000	8.625	29.8	309	150	0	circ	7.875	5.500	15.5	3031	850	0	circ	---	---	---	---	---	---	---	10/21/51	07/16/71	07/16/71	3031	3195	---	---	---	---	---	---	---	---	3195	3195	---	Inj	Inj
09629	24	F	1980 FNL	1980 FWL	Texaco E&P, Inc.	Edna E. Hunter #2	Cooper Jal #204	11.000	8.625	29.8	313	150	0	circ	7.875	5.500	14.0	3030	700	0	circ	---	---	---	---	---	---	---	10/03/51	---	---	---	---	3030	3188	---	---	---	---	---	---	0	3188	02/12/01	P&A	P&A
09620	24	G	1980 FNL	1650 FEL	Resaca Operating Co.	Maggie Dunn #1	Cooper Jal #205	11.000	8.625	28.0	300	125	0	circ	8.000	5.500	14.0	2988	200 *	1962	calc	---	---	---	---	---	---	---	04/30/50	09/21/71	03/09/94	2988	3600	2988	3251	---	---	---	---	---	---	3600	3600	---	Inj	Inj
09621	24	H	1980 FNL	330 FEL	Resaca Operating Co.	Dunn #2	Cooper Jal #206	11.000	8.625	28.0	310	125	0	circ	8.000	5.500	14.0	2983	200 *	1957	calc	---	---	---	---	---	---	---	05/04/50	---	---	---	---	---	---	06/26/99	2983	3230	CIBP	2820	35'	2785	3230	---	TA	Inj
11158	19	F	2310 FNL	1650 FWL	Resaca Operating Co.	Jack B #2	Cooper Jal #208	12.750	10.750	32.0	310	75	0	circ	8.750	7.000	23.0	2956	200 *	1700	calc	10/14/88	5.5	15.4	2827	275	0	circ	05/10/50	---	05/10/50	2956	3169	---	---	---	---	---	---	---	---	3169	3169	---	Prod	Prod
09635	24	L	2080 FSL	660 FWL	Resaca Operating Co.	Ada E. Thomas #5	Cooper Jal #209	11.000	8.625	24.0	1215	500	0	circ	7.875	5.500	14.0	3680	600	411	calc	---	---	---	---	---	---	---	11/10/54	---	03/11/05	3040	3773	3160	3629	---	---	---	---	---	---	3773	3773	---	Prod	Prod
09633	24	L	1980 FSL	660 FWL	Texaco E&P, Inc.	Ada E. Thomas #2	Cooper Jal #210	11.000	8.625	29.0	293	250	0	calc	7.875	5.500	17.0	3020	900	0	calc	---	---	---	---	---	---	---	05/18/51	---	---	---	---	3020	3191	---	---	---	---	---	---	0	3191	02/07/01	P&A	P&A
09787	24	K	2310 FSL	2310 FWL	Resaca Operating Co.	Thomas #4	Cooper Jal #211	10.750	8.625	28.0	302	125	0	circ	7.875	5.500	14.0	3001	200 *	1911	calc	02/04/04	4.0	10.5	2970	200	0	circ	04/02/50	11/21/70	01/23/09	3001	3600	3001	3244	---	---	---	---	---	---	3600	3600	---	Inj	Inj
09623	24	I	1980 FSL	660 FEL	Resaca Operating Co.	Phillips #2	Cooper Jal #213	11.000 x	8.625	32.0	302	125	0	circ	8.000 x	5.500	14.0	2995	200 *	1969	calc	---	---	---	---	---	---	---	03/13/50	05/17/71	---	---	---	2995	3220	---	---	---	---	---	---	0	3220	04/19/95	P&A	Inj
09626	24	N	990 FSL	2310 FWL	Resaca Operating Co.	Thomas #3	Cooper Jal #217	10.750	8.625	28.0	318	125	0	circ	8.000	5.500	14.0	2998	200 *	1972	calc	---	---	---	---	---	---	---	03/02/50	---	03/02/50	2998	3244	---	---	---	---	---	---	---	---	3244	3244	---	Prod	Prod
09624	24	O	330 FSL	1650 FEL	Resaca Operating Co.	Thomas #1	Cooper Jal #218	10.750	8.625	28.0	248	125	0	circ	8.000	5.500	14.0	2991	200 *	1965	calc	04/15/08	3.5	9.2	2957	114	0	circ	09/03/49	05/17/71	05/17/71	2991	3250	---	---	---	---	---	---	---	---	3250	3250	---	Inj	Inj
09622	24	P	330 FSL	700 FEL	Resaca Operating Co.	Phillips #1	Cooper Jal #219	11.000 x	8.625	32.0	249	150	0	circ	8.000 x	5.500	14.0	2981	200 *	1955	calc	---	---	---	---	---	---	---	12/24/49	---	12/24/49	2981	3208	---	---	---	---	---	---	---	---	3208	3208	---	Prod	Prod
11162	19	M	660 FSL	628 FWL	Resaca Operating Co.	A.G. Falby #4	Cooper Jal #220	11.000	8.625	22.7	291	175	0	calc	7.875	5.500	15.5	3350	1000	0	calc	---	---	---	---	---	---	---	03/23/50	08/27/71	03/11/94	2986	3600	2986	3320	---	---	---	---	---	---	3600	3600	---	Inj	Inj
09648	25	D	330 FNL	990 FWL	Resaca Operating Co.	Harrison #3	Cooper Jal #223	10.000	8.625	28.0	242	100	0	circ	8.000	5.500	14.0	2947	200 *	1921	calc	---	---	---	---	---	---	---	12/05/50	---	12/05/50	2947	3188	---	---	---	---	---	---	---	---	3188	3188	---	Prod	Prod
09646	25	C	330 FNL	2310 FWL	Resaca Operating Co.	Harrison #1	Cooper Jal #224	11.000	8.625	28.0	292	100	0	circ	8.000	5.500	15.0	2970	200 *	1944	calc	---	---	---	---	---	---	---	06/06/50	06/16/71	06/16/71	2970	3230	---	---	---	---	---	---	---	---	3230	3230	---	Inj	Inj
09650	25	B	660 FNL	1650 FEL	Resaca Operating Co.	Van Zandt #1	Cooper Jal #225	10.000	8.625	32.0	307	125	0	circ	8.000	5.500	15.0	2996	200 *	1970	calc	05/14/83	4.0	10.6	3318	0	---	---	01/08/50	---	07/23/54	2996	3318	2996	3188	---	---	---	---	---	---	3318	3318	---	Prod	Prod
09651	25	A	330 FNL	330 FEL	Resaca Operating Co.	Van Zandt #2	Cooper Jal #226	10.750	8.625	28.0	310	125	0	circ	8.000	5.500	15.0	2989	200 *	1963	calc	---	---	---	---	---	---	---	05/18/50	05/20/71	06/15/95	2989	3570	2989	3223	---	---	---	---	---	---	3570	3570	---	Prod	Prod
09647	25	E	1650 FNL	990 FWL	Resaca Operating Co.	Harrison #2	Cooper Jal #229	13.750	10.750	40.5	314	250	0	circ	9.750	7.000	26.0	2753	1027	0	circ	08/23/50	5.0	15.0	2960	0	---	---	08/30/50	---	08/30/50	2753	3170	---	---	06/29/47	3170	3225	CMT	3170	55'	3170	3700	---	Prod	Prod
09649	25	F	1650 FNL	2310 FWL	Resaca Operating Co.	Harrison #4	Cooper Jal #230	13.750	10.750	40.0	275	100	0	circ	8.000	5.500	14.0	2946	200 *	1920	calc	11/29/79	4.0	---	3226	420	2900	sqz	02/06/51	---	---	---	---	2946	3195	---	---	---	---	---	---	0	3226	03/08/01	P&A	Inj
09652	25	H	1650 FNL	330 FEL	Resaca Operating Co.	Van Zandt #3	Cooper Jal #231	11.000	8.625	28.0	222	100	0	circ	6.250	5.500	14.0	3002	200 *	0	calc	---	---	---	---	---	---	---	04/05/51	---	04/05/51	3002	3192	---	---	---	---	---	---	---	---	3192	3192	---	Prod	Prod
09561	13	O	330 FSL	1650 FEL	Resaca Operating Co.	Maggie Dunn #1	Cooper Jal #234	11.000	8.625	28.0	304	125	0	circ	8.000	5.500	14.0	2985	200 *	1959	calc	---	---	---	---	---	---	---	05/24/50	08/04/71	08/04/71	2985	3228	---	---	---	---	---	---	---	---	3228	3228	---	Inj	Inj
09659	25	E	1980 FNL	330 FWL	Resaca Operating Co.	Harrison #7	Cooper Jal #238	11.000	8.625	24.0	289	150	0	circ	7.875	5.500	15.5	3541	200 *	2451	calc	03/08/05	4.5	11.5	3012	175	0	circ	09/27/54	10/12/71	10/12/71	3032	3589	3512	3589	---	---	---	---	---	---	3589	3589	---	Inj	Inj
09653	25	G	1650 FNL	1650 FEL	Resaca Operating Co.	Van Zandt #4	Cooper Jal #241	11.000	8.625	28.0	236	100	0	circ	6.750	5.500	22.0	3003	200 *	742	calc	---	---	---	---	---	---	---	08/02/51	11/01/75	11/01/75	3003	3324	3003	3580	07/13/54	3324	3580	CMT	3348	24'	3324	3580	---	Inj	Inj
11149	19	C	990 FNL	1587 FWL	Resaca Operating Co.	Jack B #4	Cooper Jal #242	12.750	10.750	32.0	300	80	5	calc	8.750	7.000	23.0	2962	200 *	1706	calc	---	---	---	---	---	---	---	07/03/50	11/04/75	11/04/75	2962	3191	---	---	---	---	---	---	---	---	3191	3191	---	Inj	Inj
11052	18	J	1980 FSL	1980 FEL	Resaca Operating Co.	Blankenship #1	Cooper Jal #244	11.000	8.625	32.0	1050	400	0	circ	7.875	5.500	15.5	3452	250	2090	calc	05/05/08	3.5	9.2	2828	120	740	TS	08/16/46	05/05/08	05/05/08	2850	3601	---	---	---	---	---	---	---	---	3601	3601	---	Inj	Inj
09625	24	J	1980 FSL	1980 FEL	Resaca Operating Co.	Ada Thomas #2	Cooper Jal #245	10.750	8.625	28.0	265	75	0	calc	8.000	5.500	14.0	2993	200 *	1967	calc	03/23/61	4.5	10.0	3560	100	2885	calc	12/17/49	---	10/16/92	3010	3291	2993	3486	10/16/92	3359	3486	CIBP	3350	50'	3300	3560	---	Prod	Prod
09556	13	K	2310 FSL	2310 FWL	Resaca Operating Co.	Hunter #1	Cooper Jal #303	18.000	16.000	55.0	164	100	0	circ	7.875	7.000	22.0	2877	125	1215	calc	---	---	---	---	---	---	---	04/04/48	---	04/04/48	2877	3165	---	---	---	---	---	---	---	---	3165	3165	---	Prod	Prod
09562	13	J	1650 FSL	1650 FEL	Texaco E&P, Inc.	Maggie Dunn #3	Cooper Jal #304	11.000	8.625	28.0	285	100	0	circ	8.000	5.500	15.5	3021	200 *	1995	calc	---	---	---	---	---	---	---	09/08/50	---	---	---	---	3021	3211	---	---	---	---	---	---	0	3211	04/26/95	P&A	P&A
32268	19	L	2400 FSL	1130 FWL	Resaca Operating Co.	Cooper Jal #401	Cooper Jal #401	12.250	8.625	24.0	400	250	0	circ	7.875	5.500	15.5	3750	950	0	circ	---	---	---	---	---	---	---	01/13/94	---	11/21/97	3011	3285	3011	3635	11/19/97	3408	3635	CIBP	3390	35'	3355	3750	---	Prod	Prod
32292	19	L	2150 FSL	50 FWL	Resaca Operating Co.	Cooper Jal #402	Cooper Jal #402	12.250	8.625	24.0	400	250	0	circ	7.875	5.500	15.5	3750	1000	0	circ	---	---	---	---	---	---	---	01/22/94	---	11/18/97	3006	3295	3006	3658	11/16/97	3426	3658	CIBP	3400	35'	3365	3750	---	Prod	Prod
32286	19	D	150 FNL	100 FWL	Resaca Operating Co.	Cooper Jal #403	Cooper Jal #403	12.250	8.625	24.0	400	250	0	circ	7.875	5.500	15.5	3750	950	0	circ	---	---	---	---	---	---	---	01/27/94	---	01/27/94	3010	3663	---	---	---	---	---	---	---	---	3682	3750	---	Prod	Prod
32218	24	B	510 FNL	2310 FEL	Resaca Operating Co.	Cooper Jal #404	Cooper Jal #404	12.250	8.625	24.0	1180	600	0	circ	7.875	5.500	15.5	3750	925	0	circ	---	---	---	---	---	---	---	01/13/94	---	12/05/97	3013	3279	3013	3655	11/03/97	3423	3655	CIBP	3400	35'	3365	3750	---	Prod	Prod
32269	19	N	1055 FSL	1385 FWL	Resaca Operating Co.	Cooper Jal #405	Cooper Jal #405	12.250	8.625	24.0	1140	600	0	circ	7.875	5.500	15.5	3750	925	0	circ	---	---	---	---	---	---	---	12/28/93	---	12/28/93	2988	3632	---	---	---	---	---	---	---	---	3730	3750	---	Prod	Prod
32568	24	H	2522 FNL	400 FEL	Resaca Operating Co.	Cooper Jal #406	Cooper Jal #406	12.250	8.625	24.0	410	250	0	circ	7.875	5.500	15.5	3750	950	0	circ	---	---	---	---	---	---	---	10/01/94	---	09/15/08	3018	3713	3132	3668	---	---	---	---	---	---	3750	3750	---	Prod	Prod
32569	24	J	2540 FSL	1640 FEL	Resaca Operating Co.	Cooper Jal #407	Cooper Jal #407	12.250	8.625	24.0	410	250	0	circ	7.875	5.500	15.5	3750	800	0	circ	---	---	---	---	---	---	---	08/25/94	---	09/03/08	3036	3678	3144	3678	---	---	---	---	---	---	3750	3750	---	Prod	Prod
32856	13	P	1250 FSL	200 FEL	Resaca Operating Co.	Cooper Jal #408	Cooper Jal #408	12.250	8.625	24.0	392	250	0	circ	7.875	5.500	15.5	3786	1300	465	TS	---	---	---	---	---	---	---	05/29/95	---	07/25/96	3046	3296	3102	3492	07/23/96	3478	3492	CIBP	3400	10'	3390	3800	---	Prod	Prod
32570	24	K	2500 FSL	1450 FWL	Resaca Operating Co.	Cooper Jal #409	Cooper Jal #409	12.250	8.625	24.0	417	250	0	circ	7.875	5.500	15.5	3750	850	0	circ	---	---	---	---	---	---	---	10/01/94	---	10/01/94	3034	3687	---	---	---	---	---	---	---	---	3717	3750	---	Prod	Prod
32857	24	F	1425 FNL	1450 FWL	Resaca Operating Co.	Cooper Jal #410	Cooper Jal #410	12.250	8.625	24.0	423	250	0	circ	7.875	5.500	15.5	3786	1358	0	circ	---	---	---	---	---	---	---	06/21/95	---	05/20/04	3786	3940	3065	3655	05/13/04	3028	3655	PKR	3681	0	3940	3940	---	Prod	Prod
32858	24	J	1600 FSL	1425 FEL	Resaca Operating Co.	Cooper Jal #411	Cooper Jal #411	11.000	8.625	24.0	391	250	0	circ	7.875	5.500	15.5	3800	1100	500	TS	---	---	---	---	---	---	---	08/23/95	---	10/08/08	3026	3778	3046	3620	---	---	---	---	---	---	3719	3800	---	Prod	Prod
32892	24	P	980 FSL	225 FEL	Resaca Operating Co.	Cooper Jal #412	Cooper Jal #412	12.250	8.625	24.0	406	250	0	circ	7.875	5.500	15.5	3786	1179	0	circ	---	---	---	---	---	---	---	07/30/95	---	12/28/97	3016	3283	3086	3628	12/24/97	3476	3628	CIBP	3445	35'	3410	3800	---	Prod	Prod
32571	24	O	330 FSL	2550 FEL	Resaca Operating Co.	Cooper Jal #414	Cooper Jal #414	12.250	8.625	24.0	430	250	0	circ	7.875	5.500	15.5	3750	890	0	circ	---	---	---	---	---	---	---	09/25/94	---	11/23/96	3028	3174	3146	3617	11/22/96	3357	3617	CIBP	3300	35'	3265	3750	---	Prod	Prod
32855	25	D	825 FNL	330 FWL	Resaca Operating Co.	Cooper Jal #415	Cooper Jal #415	11.000	8.625	24.0	420	250	0	circ	7.875	5.500	15.5	3825	725	1150	TS	---	---	---	---	---	---	---	06/12/95	---	08/02/96	3038	3710	3076	3710	---	---	---	---	---	---	3784	3825	---	Prod	Prod
32551	13	P	330 FSL	500 FEL	Resaca Operating Co.	Cooper Jal #419	Cooper Jal #419	12.250	8.625	24.0	420	250	0	circ	7.875	5.500	15.5	3750	930	0	circ	---	---	---	---	---	---	---	10/06/94	---	12/20/03	3048	3703	3158	3703	---	---	---	---	---	---	3707	3750	---	Prod	Prod
33458	24	G	2310 FNL	2310 FEL	Resaca Operating Co.	Cooper Jal #420	Cooper Jal #420	12.250	8.625	24.0	432	250	0	circ	7.875	5.500	15.5	3843	1150	0	circ	---	---	---	---	---	---	---	08/07/96	---	09/23/08	3024	3752	3050	3362	---	---	---	---	---	---	3732	3825	---	Prod	Prod
33459	24	J	1575 FSL	2525 FEL	Resaca Operating Co.	Cooper Jal #421	Cooper Jal #421	12.250	8.625	24.0	409	250	0	circ	7.875	5.500	15.5	3800	1150	0	circ	---	---	---	---	---	---	---	08/10/96	---	09/23/05	3024	3748	3061	3356	---	---	---	---	---	---	3780	3800	---	Prod	Prod
38180	18	D	1310 FNL	1248 FWL	Resaca Operating Co.	Cooper Jal #501	Cooper Jal #501	12.250	8.625	24.0	414	250	0	calc	7.875	5.500	15.5	3731	1200	0	calc	---	---	---	---	---	---	---	02/22/07	---	02/22/07	3368	3668	---	---	---	---	---	---	---	---	3680	3731	---	Prod	Prod
38188	18	E	2630 FNL	1249 FWL	Resaca Operating Co.	Cooper Jal #502	Cooper Jal #502	12.250	8.625	24.0	412	250	0	circ	7.875	5.500	15.5	3738	650	406	TS	---	---	---	---	---	---	---	03/30/07	---	03/30/07	3377	3633	---	---	---	---	---	---	---	---	3640	3740	---	Prod	Prod
38330	18	L	1332 FSL	1207 FWL	Resaca Operating Co.	Cooper Jal #503	Cooper Jal #503	12.250	8.625	24.0	400	250	0	circ	7.875	5.500	15.5	3730	1200	460	TS	---	---	---	---	---	---	---	05/10/07	---	05/10/07	3310	3655	---	---	---	---	---	---	---	---	3659	3756	---	Prod	Prod
38189	18	F	1330 FNL	2468 FWL	Resaca Operating Co.	Cooper Jal #504	Cooper Jal #504	12.250	8.625	24.0	402	250	0	circ	7.875	5.500	15.5	3693	650	1493	TS	---	---	---	---	---	---	---	03/12/07	---	03/12/07	3354	3638	---	---	---	---	---	---	---	---	3637	3696	---	Prod	Prod
38263	18	F	2581 FNL	2369 FWL	Resaca Operating Co.	Cooper Jal #505	Cooper Jal #505	12.250	8.625	24.0	417	250	0	circ	7.875	5.500	15.5	3728	700	2250	CBL	---	---	---	---	---	---	---	03/22/07	---	03/22/07	2988	3682	---	---	---	---	---	---	---	---	3718	3746	---	Prod	Prod
38201	18	O	1310 FSL	2477 FEL	Resaca Operating Co.	Cooper Jal #506	Cooper Jal #506	12.250	8.625	24.0	409	250	0	circ	7.875	5.500	15.5	3771	700	0	calc	---	---	---	---	---	---	---	02/14/07	---	02/14/07	3180	3709	---	---	---	---	---	---	---	---	3721	3780	---	Prod	Prod
38270	18	H	2546 FNL	1238 FEL	Resaca Operating Co.	Cooper Jal #508	Cooper Jal #508	12.250	8.625	24.0	425	250	0	circ	7.875	5.500	15.5	3749	700	0	calc	---	---	---	---	---	---	---	04/11/07	---	04/11/07	3326	3695	---	---	---	---	---	---	---	---	3704	3750	---	Prod	Prod
38202	18	J	1370 FSL	1368 FEL	Resaca Operating Co.	Cooper Jal #509	Cooper Jal #509	12.250	8.625	24.0	396	250	0	circ	7.875	5.500	15.5	3750	650	208	calc	---	---	---	---	---	---	---	03/06/07	---	03/06/07	3409	3690	---	---	---	---	---	---	---	---	3708	3755	---	Prod	Prod
39104	24	C	980 FNL	2280 FWL	Resaca Operating Co.	Cooper Jal #511	Cooper Jal #511	12.250	8.625	24.0	1155	520	0	circ	7.875	5.500	15.5	3762	420	1474	calc	---	---	---	---	---	---	---	11/06/08	---	11/06/08	3022	3534	---	---	---	---	---	---	---	---	3723	3772	---	Prod	Prod
39103	24	H	1600 FNL	300 FEL	Resaca Operating Co.	Cooper Jal #512	Cooper Jal #512	12.250	8.625	24.0	1170	500	0	circ	7.875	5.500	15.5	3733	625	0	circ	---	---	---	---	---	---	---	10/25/08	---	10/25/08	3000	3655	---	---	---	---	---	---	---	---	3668	3745	---	Prod	Prod
39102	24	F	2200 FNL	2280 FWL	Resaca Operating Co.	Cooper Jal #514	Cooper Jal #514	12.250	8.625	24.0	1152	500	0	circ	7.875	5.500	15.5	3808	520	0	circ	---	---	---	---	---	---	---	10/30/08	---	12/21/09	3030	3762	---	---	---	---	---	---	---	---	3779	3815	---	Prod	Prod
39101	25	B	1100 FNL	1650 FEL	Resaca Operating Co.	Cooper Jal #515	Cooper Jal #515	12.250	8.625	24.0	1156	500	0	circ	7.875	5.500	15.5	3762	520	929	calc	---	---	---	---	---	---	---	11/14/08	---	02/09/10	2988	3794	---	---	---	---	---	---	---	---	3743	3801	---	Prod	Prod
39099	25	A	110 FNL	160 FEL	Resaca Operating Co.	Cooper Jal #517	Cooper Jal #517	12.250	8.625	24.0	1110	520	0	circ	7.875	5.500	15.5	3802	500	0	circ	---	---	---	---	---	---	---	10/15/08	---	08/28/09	3030	3756	2997	3318	---	---	---	---	---	---	3802	3810	---	Prod	Prod
26429	26	H	1674 FNL	472 FEL	Northeast Loop Gas Company, L.P.	Phillips-Goldstone #2	Phillips-Goldstone #2	12.250	8.625	28.0	486	300	0	circ	7.875	5.500	17.0	3398	700	0	circ	---	---	---	---	---	---	---	10/20/08	---	10/20/08	---	---	3017	3099	---	---	---	---	---	---	0	3400	08/06/02	P&A	P&A
09655	25	K	1980 FSL	1980 FWL	Lewis B. Burleson, Inc.	S. W. Harrison #3	S. W. Harrison #3	11.000	8.625	29.8	309	150	0	circ	7.875	5.500	15.5	2952	750	0	circ	09/12/78	4.0	10.5	3594	35	2735	circ	12/24/51	---	12/24/51	---	---	2952	3594	---	---	---	---	---	---	0	3594	02/17/92	P&A	P&A
26436	25	K	1980 FSL	1470 FWL	Cimarex Energy Co. of Colorado	S. W. Harrison #9	S. W. Harrison #9	14.750	11.750	47.0	1345	600	0	circ	10.625	8.625	32.0	4091	1580	0	circ	01/15/80	5.5	15.5	10797	325	9100	TS	01/21/80	---	3/30/1981	10311	10330	10311	10416	03/30/81	10390	10416	SQZ	---	200	10618	10800	---	Prod	Prod
09563	13	H	2310 FNL	330 FEL	Range Operating New Mexico LLC	Toby #1	Toby #1	13.000	8.625	28.0	289	100	0	circ	8.000	5.500	15.5	3450	100 *	2937	calc	---	---	---	---	---	---	---	10/01/50	---	01/27/89	2995	3134	---	---	01/02/89	3200	3615	RBP	3148	0	3148	3615	---	Prod	Prod
29126	13	H	1650 FNL	990 FEL	Range Operating New Mexico LLC	Toby #2	Toby #2	12.250	8.625	24.0	393	350	0	circ	7.875	5.500	14.0	3800	1050	0	circ	---	---	---	---	---	---	---	03/15/85	---	9/27/1995	3020	3764	3533	3764	09/27/95	3533	3764	CIBP	3380	0	3380	3800	---	Prod	Prod

x - assumed

* - DVT tool utilized - only first stage shown

ATTACHMENT TO FORM C-108
Resaca Operating Co.
Cooper Jal Unit

CURRENT WELLBORE SCHEMATICS

PLUGGED WELLS

CURRENT WELLBORE SCHEMATIC

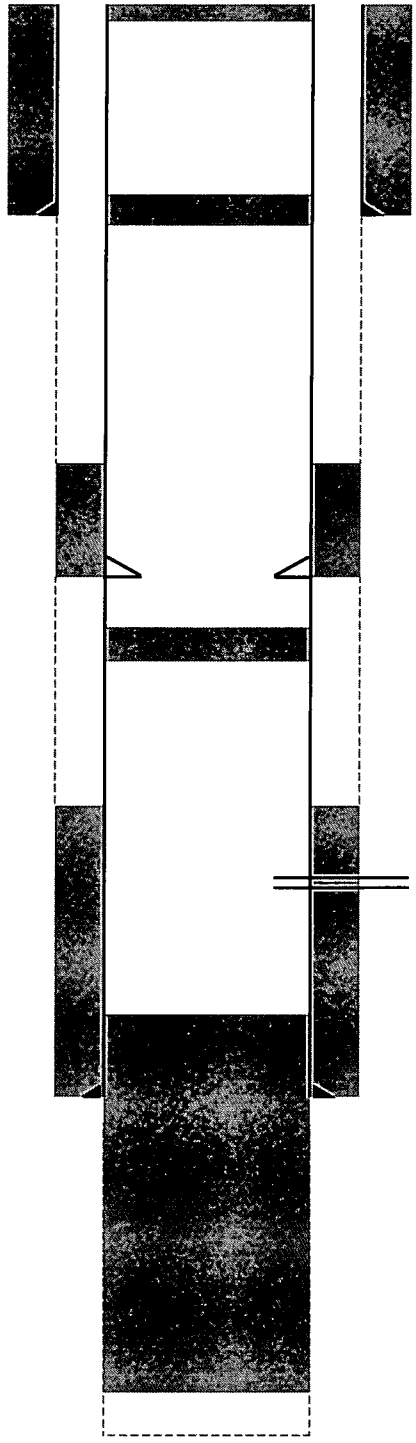
Operator.	Resaca Operating Co.
Well Name.	Cooper Jal #104
Well Location·	
Calls	1980' FNL, 660' FWL
Unit	E
Section	18
Township	24S
Range	37E

15 sx cmt plug @ surf

20 sx cmt plug 243' - 350'
TOC inside 5 1/2" tagged @ 243'

20 sx cmt plug 1400' - 1500'

25 sx cmt plug 3387' - 3578'
TOC tagged @ 3387'



Surface Casing

Hole Size (in)	13
Casing Size (in)·	8 5/8
Casing Weight (ppf).	28
Setting Depth (ft)·	291
Amount Cement (sx)	125
Top of Cement (ft).	0
TOC Method	Circulated

DV Tool

Depth (ft)·	1257
Amount Cement (sx).	100
Top of Cement (ft)	1074
TOC Method·	Calculated

Perforations

Top (ft)·	3015
Bottom (ft).	3225

Production Casing

Hole Size (in)	8
Casing Size (in)·	5
Casing Weight (ppf).	12
Setting Depth (ft)	3510
Amount Cement (sx)	125
Top of Cement (ft)	2955
TOC Method·	Calculated

Open Hole

Hole Size (in).	4 1/4
Top (ft).	3510
Bottom (ft)	3655

Total Depth (ft)· 3655

CURRENT WELLBORE SCHEMATIC

Operator.	Resaca Operating Co.
Well Name.	Cooper Jal #112
Well Location.	
Calls	330' FSL, 990' FWL
Unit	M
Section	13
Township	24S
Range	36E

perf sqz holes @ 300'

sqz 120 sx cmt, circulated to surface

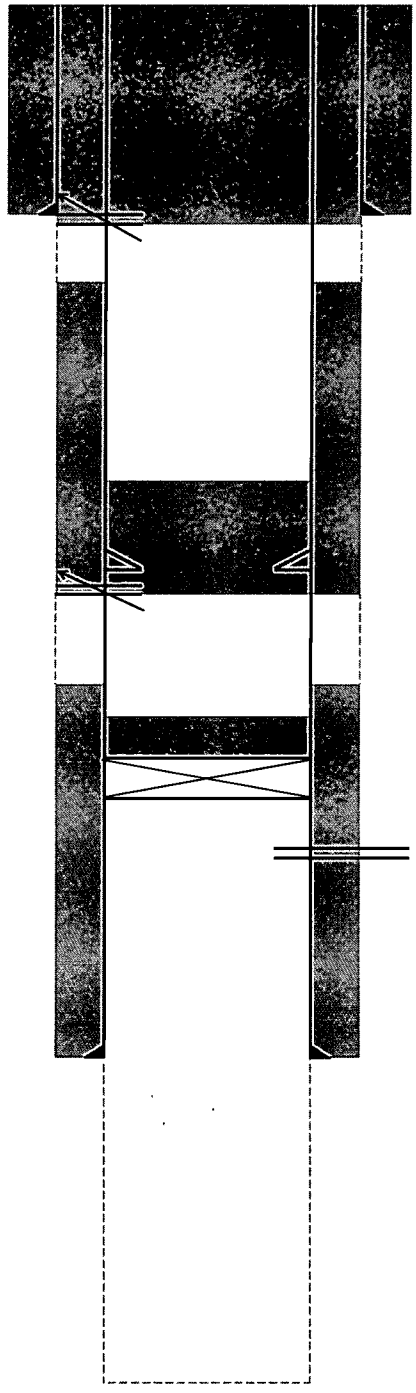
perf sqz holes @ 1300'

sqz 50 sx cmt

TOC inside 5 1/2" tagged @ 1047'

CIBP @ 2950' w/ 25 sx cmt

TOC tagged @ 2660'



Surface Casing

Hole Size (in)·	11
Casing Size (in)·	8 5/8
Casing Weight (ppf).	28
Setting Depth (ft).	250
Amount Cement (sx)	100
Top of Cement (ft)·	0
TOC Method	Circulated

DV Tool

Depth (ft)·	1233
Amount Cement (sx)·	200
Top of Cement (ft)·	Unknown
TOC Method.	----------

Perforations

Top (ft).	3000
Bottom (ft)	3268

Production Casing

Hole Size (in)	8
Casing Size (in)·	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft)	3442
Amount Cement (sx).	200
Top of Cement (ft)	2416
TOC Method·	Calculated

Open Hole

Hole Size (in)·	4 3/4
Top (ft).	3442
Bottom (ft)·	3617

Total Depth (ft). 3617

CURRENT WELLBORE SCHEMATIC

Operator	Resaca Operating Co
Well Name:	Cooper Jal #123
Well Location:	
Calls	330' FNL, 990' FWL
Unit	D
Section	19
Township	24S
Range	37E

40 sx cmt plug surf - 350'

csg leak 634' - 664'

sqz 300 sx cmt, circulated to surface

35 sx cmt plug 1020' - 1400'

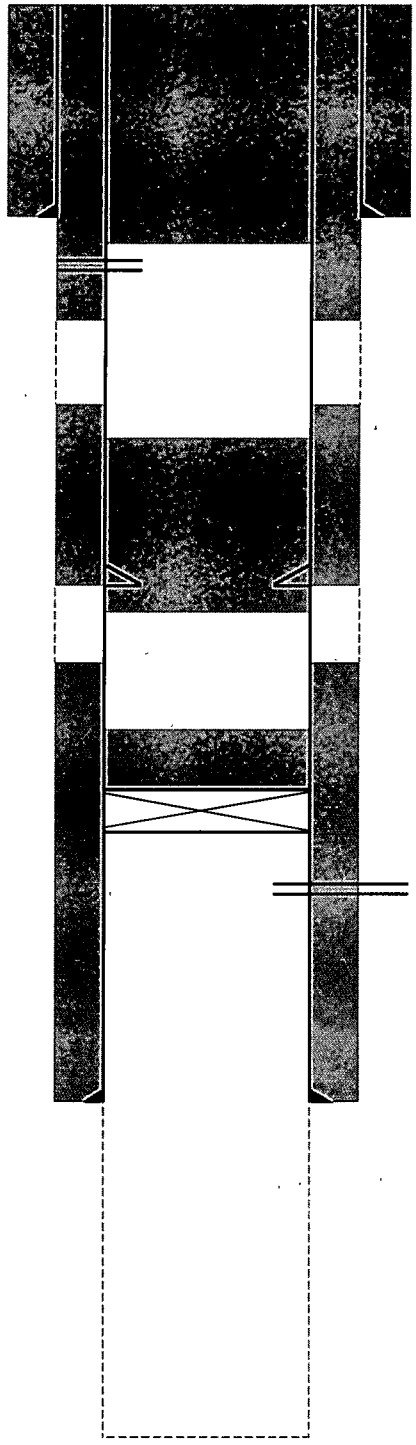
TOC tagged @ 1020'

25 sx cmt plug 2689' - 2889'

TOC tagged @ 2689'

CIBP @ 2924' w/ 35 sx cmt

TOC tagged @ 2889



Surface Casing

Hole Size (in):	12 1/2
Casing Size (in)	9 5/8
Casing Weight (ppf):	36
Setting Depth (ft):	290
Amount Cement (sx)	150
Top of Cement (ft):	0
TOC Method:	Calculated

DV Tool

Depth (ft).	1357
Amount Cement (sx):	100
Top of Cement (ft).	812
TOC Method	Calculated

Perforations

Top (ft):	2996
Bottom (ft)	3217

Production Casing

Hole Size (in).	7 7/8
Casing Size (in).	5 1/2
Casing Weight (ppf):	17
Setting Depth (ft)	3342
Amount Cement (sx)	250
Top of Cement (ft):	1980
TOC Method	Calculated

Open Hole

Hole Size (in)	4 3/4
Top (ft)	3342
Bottom (ft)	3650

Total Depth (ft). 3650

CURRENT WELLBORE SCHEMATIC

Operator	Resaca Operating Co.
Well Name	Cooper Jal #129
Well Location	
Calls	1650' FNL, 1587' FWL
Unit	F
Section	19
Township	24S
Range	37E

perf sqz holes @ 400'

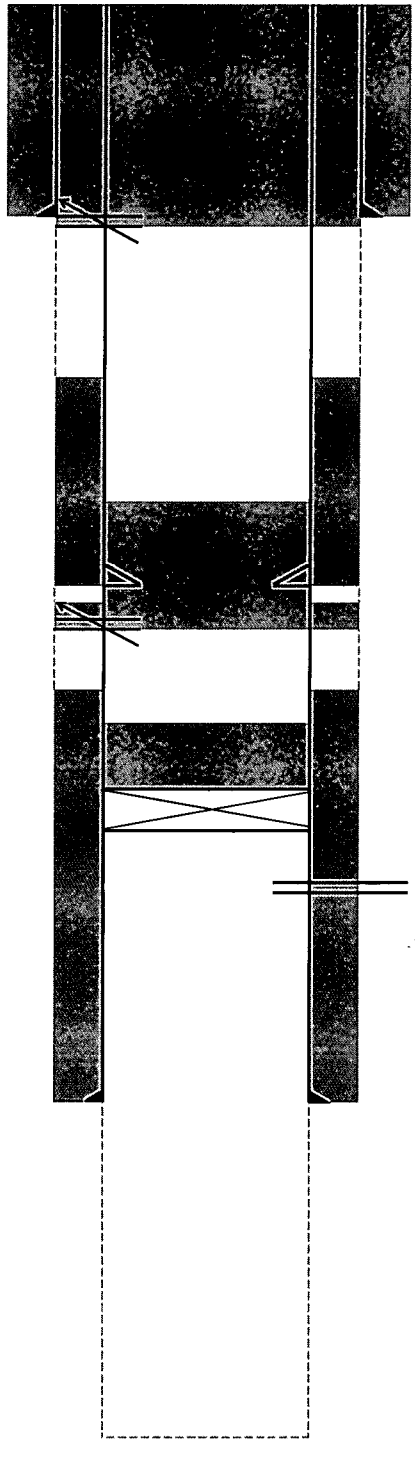
sqz 155 sx cmt, circulated to surface

perf sqz holes @ 1300'

sqz 50 sx cmt

TOC inside 5 1/2" tagged @ 1070'

CIBP @ 2975' w/ 30 sx cmt



Surface Casing

Hole Size (in)	Unknown
Casing Size (in).	8 5/8
Casing Weight (ppf)	Unknown
Setting Depth (ft)	330
Amount Cement (sx):	175
Top of Cement (ft)	Unknown
TOC Method.	----------

DV Tool

Depth (ft):	Unknown
Amount Cement (sx).	100
Top of Cement (ft)	Unknown
TOC Method.	----------

Perforations

Top (ft)	3018
Bottom (ft).	3215

Production Casing

Hole Size (in)	Unknown
Casing Size (in)	5 1/2
Casing Weight (ppf)	Unknown
Setting Depth (ft)	3336
Amount Cement (sx)	200
Top of Cement (ft)	Unknown
TOC Method	----------

Open Hole

Hole Size (in).	Unknown
Top (ft)	3336
Bottom (ft)	3670

Total Depth (ft). 3670

CURRENT WELLBORE SCHEMATIC

Operator	Resaca Operating Co
Well Name	Cooper Jal #137
Well Location	
Calls	990' FNL, 330' FWL
Unit	D
Section	25
Township	24S
Range	36E

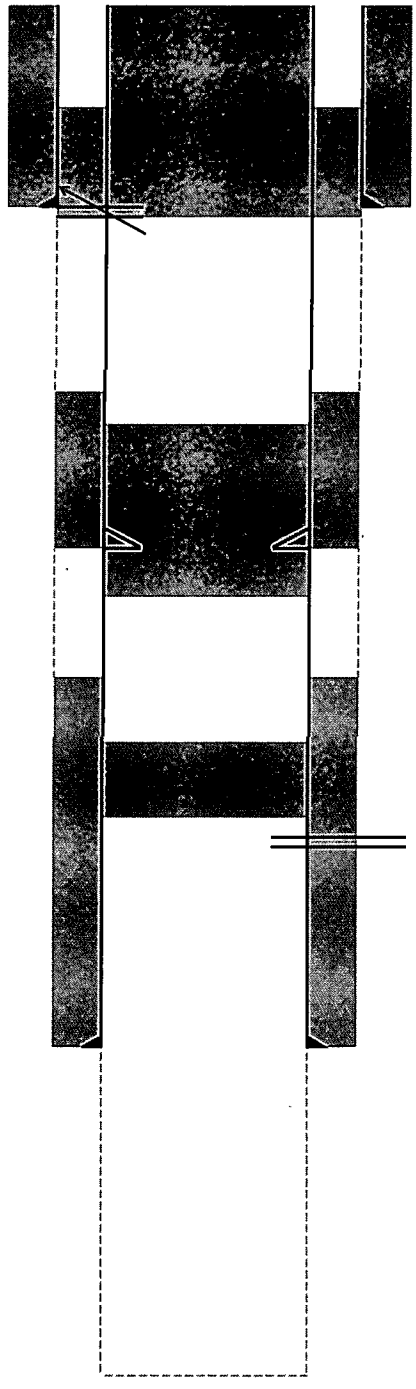
20 sx cmt plug surf - 170'

cut csg & perf sqz holes @ 339'
sqz 40 sx cmt
TOC inside 5 1/2" tagged @ 170'

cut csg @ 453' & 461'
(not free)

55 sx cmt plug 1072' - 1615'

35 sx cmt plug 2830' - 3195'
TOC tagged @ 2830'



Surface Casing

Hole Size (in)	12 1/4
Casing Size (in).	8 5/8
Casing Weight (ppf)	24
Setting Depth (ft).	289
Amount Cement (sx).	150
Top of Cement (ft)	0
TOC Method:	Circulated

DV Tool

Depth (ft).	1186
Amount Cement (sx)	100
Top of Cement (ft).	641
TOC Method	Calculated

Perforations

Top (ft)	3219
Bottom (ft).	3412

Production Casing

Hole Size (in)	7 7/8
Casing Size (in)	5 1/2
Casing Weight (ppf)	15 5
Setting Depth (ft).	3463
Amount Cement (sx).	200
Top of Cement (ft)	2373
TOC Method	Calculated

Open Hole

Hole Size (in).	4 3/4
Top (ft)	3463
Bottom (ft)	3560

Total Depth (ft): 3560

CURRENT WELLBORE SCHEMATIC

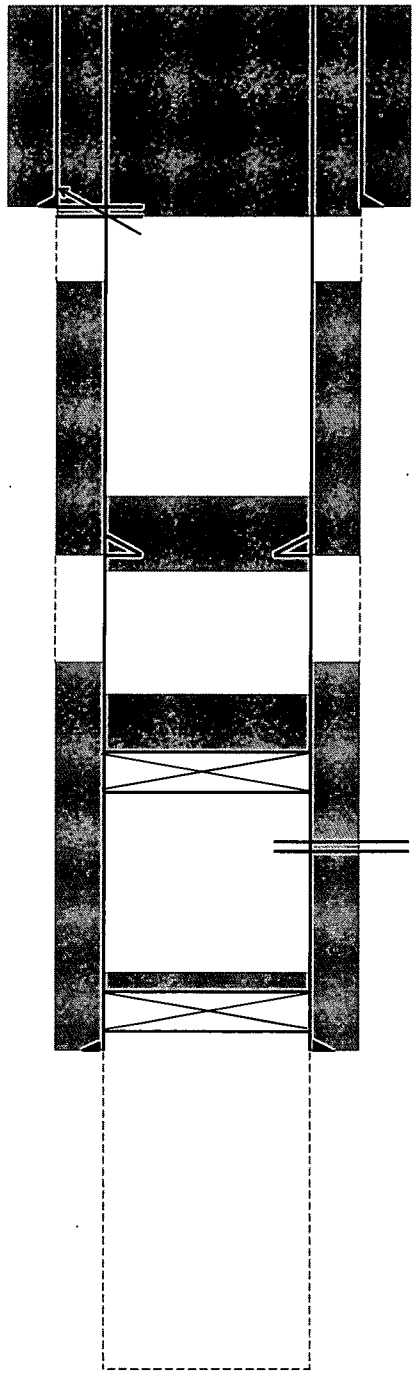
Operator	Resaca Operating Co.
Well Name.	Cooper Jal #143
Well Location	
Calls	2310' FNL, 1650' FWL
Unit	F
Section	25
Township	24S
Range	36E

perf sqz holes @ 350'
sqz 100 sx cmt

25 sx cmt plug 1080' - 1300'
TOC tagged @ 1080'

CIBP @ 2900' w/ 25 sx cmt
TOC tagged @ 2658'

CIBP @ 3350' w/ 10' cmt



Surface Casing

Hole Size (in)·	12 1/4
Casing Size (in).	8 5/8
Casing Weight (ppf)·	24
Setting Depth (ft):	280
Amount Cement (sx)	150
Top of Cement (ft)	0
TOC Method	Circulated

DV Tool

Depth (ft)·	1199
Amount Cement (sx)·	100
Top of Cement (ft)	654
TOC Method.	Calculated

Perforations

Top (ft)	2996
Bottom (ft).	3205

Production Casing

Hole Size (in)·	7 7/8
Casing Size (in)·	5 1/2
Casing Weight (ppf)·	14
Setting Depth (ft):	3450
Amount Cement (sx)	200
Top of Cement (ft):	2570
TOC Method	CBL

Open Hole

Hole Size (in)·	4 3/4
Top (ft).	3450
Bottom (ft)·	3550

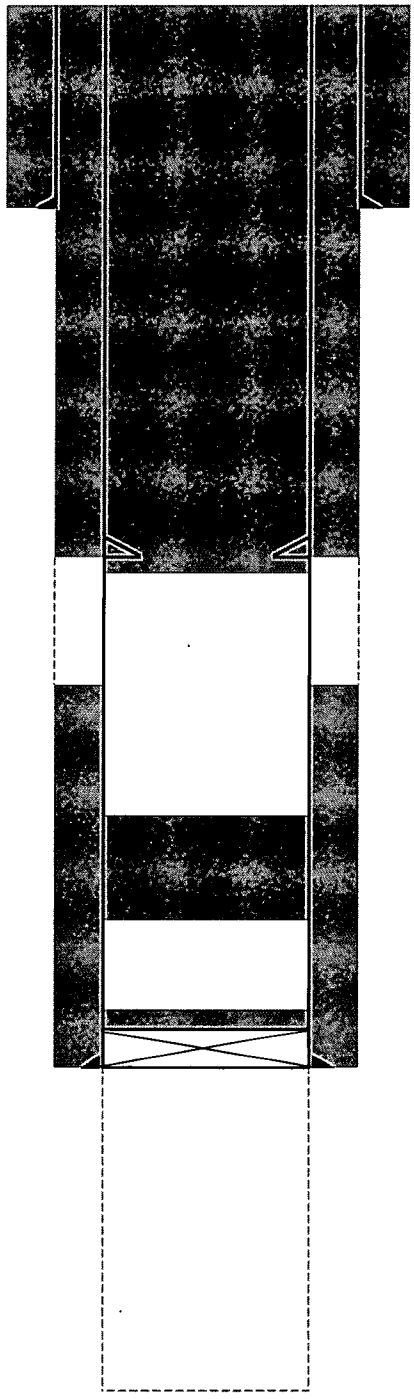
Total Depth (ft) 3550

CURRENT WELLBORE SCHEMATIC

Operator.	Resaca Operating Co.
Well Name.	Cooper Jal #144
Well Location:	
Calls	2310' FNL, 990' FEL
Unit	H
Section	25
Township	24S
Range	36E

150 sx cmt plug surf - 1255'

csg leak 323' - 750'
sqz multiple times, 1730 sx cmt total
circulated to surface



34 sx cmt plug 2730' - 2990'

CIBP @ 3345' w/ 5 sx cmt

Surface Casing

Hole Size (in)·	12 1/4
Casing Size (in)	8 5/8
Casing Weight (ppf)·	32
Setting Depth (ft)	286
Amount Cement (sx).	225
Top of Cement (ft)	0
TOC Method.	Circulated

DV Tool

Depth (ft)·	1196
Amount Cement (sx).	100
Top of Cement (ft)·	651
TOC Method·	Calculated

Production Casing

Hole Size (in)	7 7/8
Casing Size (in)·	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft)	3389
Amount Cement (sx)·	200
Top of Cement (ft)	2299
TOC Method	Calculated

Open Hole

Hole Size (in)·	4 3/4
Top (ft):	3389
Bottom (ft).	3490

Total Depth (ft) 3490

CURRENT WELLBORE SCHEMATIC

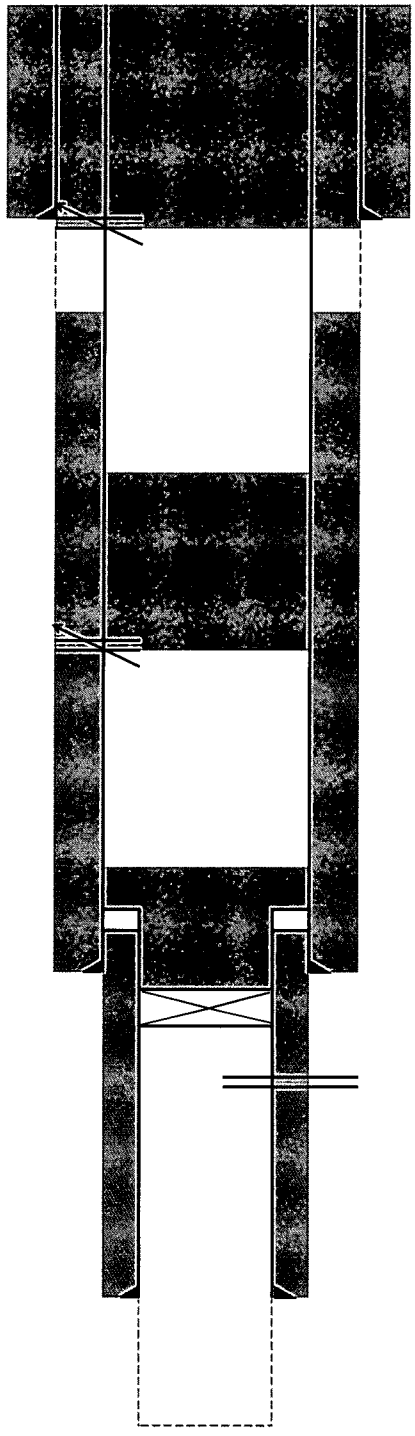
Operator:	Resaca Operating Co.
Well Name:	Cooper Jal #147
Well Location.	
Calls	2310' FNL, 330' FWL
Unit	E
Section	19
Township	24S
Range	37E

perf sqz holes @ 300'
sqz 120 sx cmt; circulated to surface

csg leak 649' - 680'
sqz 500 sx cmt

perf sqz holes @ 1200'
sqz 50 sx cmt
TOC inside 7 " tagged @ 995'

CIBP @ 2950 w/ 75' cmt
TOC tagged @ 2545'



Surface Casing

Hole Size (in):	10 3/4
Casing Size (in)	9 5/8
Casing Weight (ppf):	32
Setting Depth (ft).	267
Amount Cement (sx).	75
Top of Cement (ft)	0
TOC Method.	Calculated

Production Casing

Hole Size (in).	8 3/4
Casing Size (in):	7
Casing Weight (ppf).	20
Setting Depth (ft).	2975
Amount Cement (sx)	400
Top of Cement (ft):	463
TOC Method.	Calculated

Perforations

Top (ft)	3006
Bottom (ft):	3468

Liner

Casing Size (in):	4 1/2
Casing Weight (ppf).	9.5
Liner Top (ft):	2916
Liner Bottom (ft)	3485
Amount Cement (sx).	280
Top of Cement (ft):	2916
TOC Method	Circulated

Open Hole

Hole Size (in):	3 7/8
Top (ft)	3485
Bottom (ft).	3576

Total Depth (ft) 3576

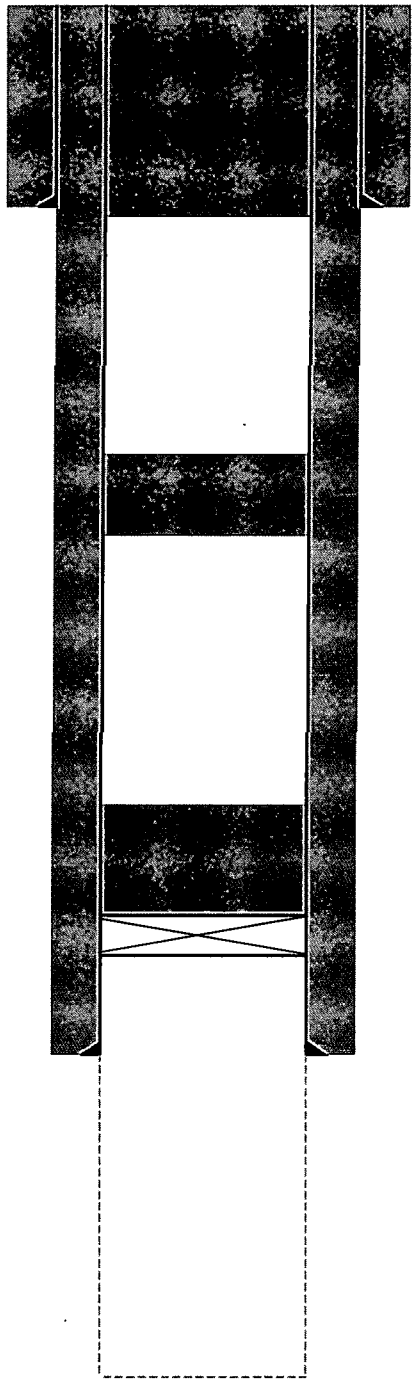
CURRENT WELLBORE SCHEMATIC

Operator:	Resaca Operating Co
Well Name.	Cooper Jal #204
Well Location	
Calls	1980' FNL, 1980' FWL
Unit	F
Section	24
Township	24S
Range	36E

40 sx cmt plug surf - 350'

25 sx cmt plug 1065' - 1300'
TOC tagged @ 1065'

CIBP @ 2980' w/ 30 sx cmt
TOC tagged @ 2655'



Surface Casing

Hole Size (in):	11
Casing Size (in):	8 5/8
Casing Weight (ppf):	29.8
Setting Depth (ft):	313
Amount Cement (sx)	150
Top of Cement (ft).	0
TOC Method	Circulated

Production Casing

Hole Size (in):	7 7/8
Casing Size (in)	5 1/2
Casing Weight (ppf):	14
Setting Depth (ft).	3030
Amount Cement (sx)	700
Top of Cement (ft).	0
TOC Method	Circulated

Open Hole

Hole Size (in)	4 3/4
Top (ft):	3030
Bottom (ft)	3188

Total Depth (ft). 3188

CURRENT WELLBORE SCHEMATIC

Operator:	Resaca Operating Co
Well Name.	Cooper Jal #210
Well Location:	
Calls	1980' FSL, 660' FWL
Unit	L
Section	24
Township	24S
Range	36E

10 sx cmt plug surf - 30'

perf sqz holes @ 350'

sqz 75 sx cmt

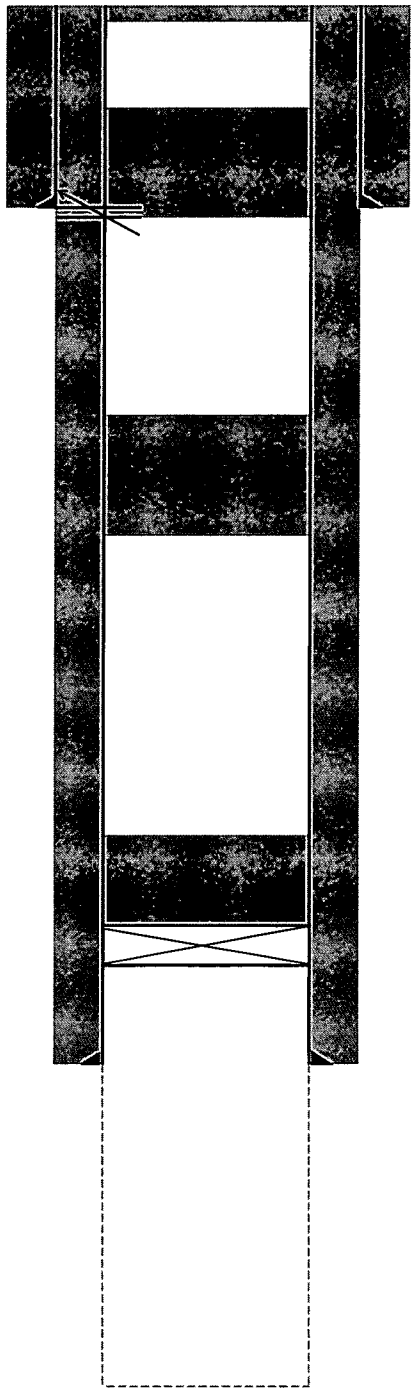
TOC inside 5 1/2" tagged @ 145'

25 sx cmt plug 1050' - 1300'

TOC tagged @ 1050'

CIBP @ 2970' w/ 25 sx cmt

TOC tagged @ 2750'



Surface Casing

Hole Size (in).	11
Casing Size (in)	8 5/8
Casing Weight (ppf).	29
Setting Depth (ft):	293
Amount Cement (sx)	250
Top of Cement (ft)	0
TOC Method.	Calculated

Production Casing

Hole Size (in):	7 7/8
Casing Size (in).	5 1/2
Casing Weight (ppf):	17
Setting Depth (ft)	3020
Amount Cement (sx).	900
Top of Cement (ft)	0
TOC Method:	Calculated

Open Hole

Hole Size (in).	4 3/4
Top (ft).	3020
Bottom (ft):	3191

Total Depth (ft). 3191

CURRENT WELLBORE SCHEMATIC

Operator	Resaca Operating Co.
Well Name	Cooper Jal #304
Well Location.	
Calls	1650' FSL, 1650' FEL
Unit	J
Section	13
Township	24S
Range	36E

40 sx cmt plug @ surf

csg leaks below 442'

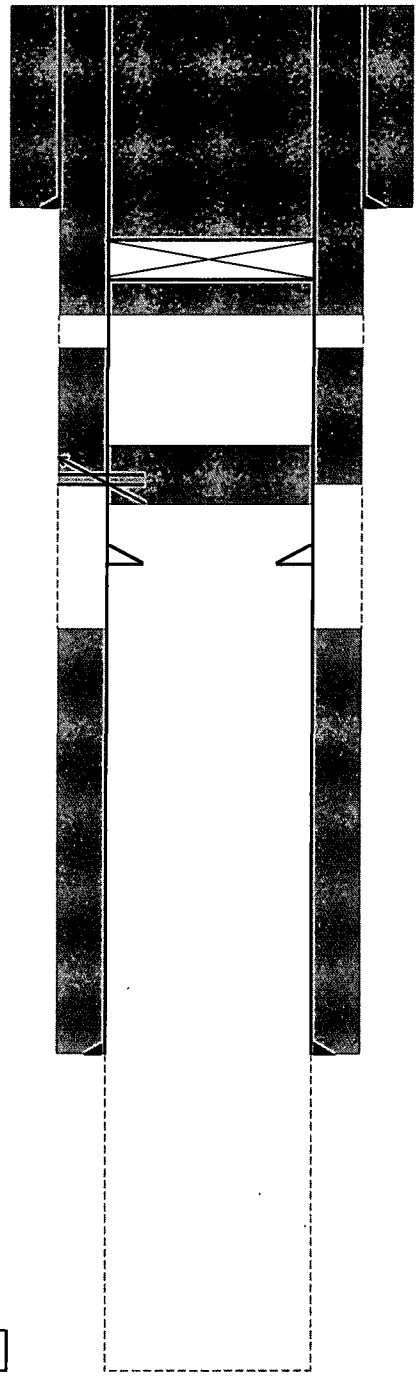
cmt retainer @ 442'

sqz 160 sx cmt, circulated to surface

cmt plug tagged @ 1250'

perf sqz holes @ 1264'

sqz 200 sx cmt



*Note additional plugs are believed to exist in this well, however, documentation is not available

Total Depth (ft). 3211

Surface Casing

Hole Size (in)	11
Casing Size (in).	8 5/8
Casing Weight (ppf):	28
Setting Depth (ft)	285
Amount Cement (sx).	100
Top of Cement (ft).	0
TOC Method	Circulated

DV Tool

Depth (ft)	Unknown
Amount Cement (sx)	0
Top of Cement (ft)	----------
TOC Method	----------

Production Casing

Hole Size (in)	8
Casing Size (in)	5 1/2
Casing Weight (ppf)	15 5
Setting Depth (ft)	3021
Amount Cement (sx)	200
Top of Cement (ft)	1995
TOC Method.	Calculated

Open Hole

Hole Size (in)	4 3/4
Top (ft)	3021
Bottom (ft)	3211

CURRENT WELLBORE SCHEMATIC

Operator.	Lewis B. Burleson, Inc.
Well Name·	S. W. Harrison #3
Well Location:	
Calls	1980' FSL, 1980' FWL
Unit	K
Section	25
Township	24S
Range	36E

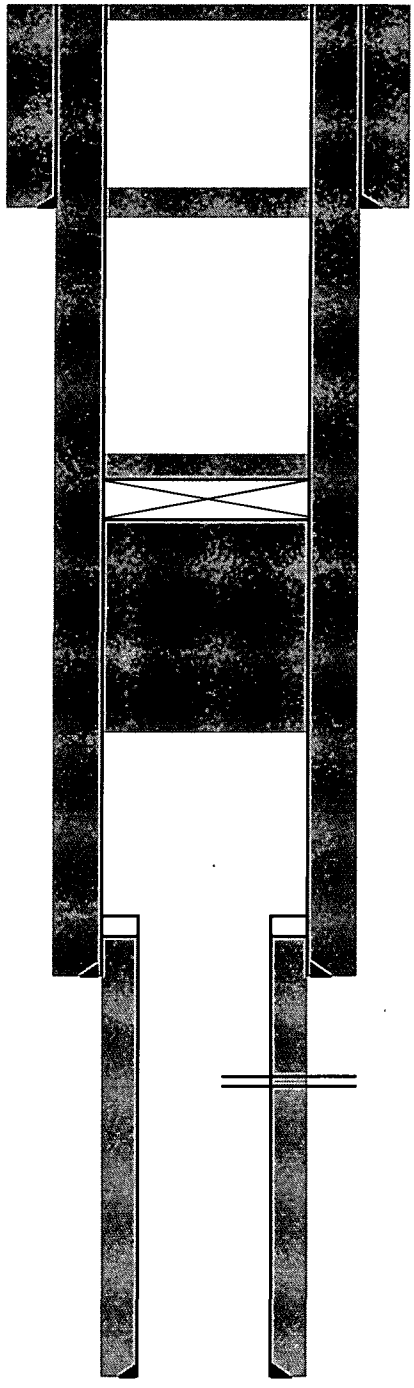
10 sx cmt plug surf - 96'

15 sx cmt plug 205' - 340'

10 sx cmt plug 1000' - 1100'

cmt retainer @ 1100'

sqz 150 sx cmt



Surface Casing

Hole Size (in)	11
Casing Size (in).	8 5/8
Casing Weight (ppf).	29.8
Setting Depth (ft).	309
Amount Cement (sx).	150
Top of Cement (ft)	0
TOC Method	Circulated

Production Casing

Hole Size (in)·	7 7/8
Casing Size (in).	5 1/2
Casing Weight (ppf)	14
Setting Depth (ft).	2952
Amount Cement (sx)·	750
Top of Cement (ft)	0
TOC Method·	Circulated

Perforations

Top (ft):	3397
Bottom (ft)	3554

Liner

Casing Size (in)·	4
Liner Weight (ppf).	10 5
Liner Top (ft)·	2735
Liner Bottom (ft).	3594
Amount Cement (sx)·	35
Top of Cement (ft)	2735
TOC Method	Circulated

Total Depth (ft)· 3594

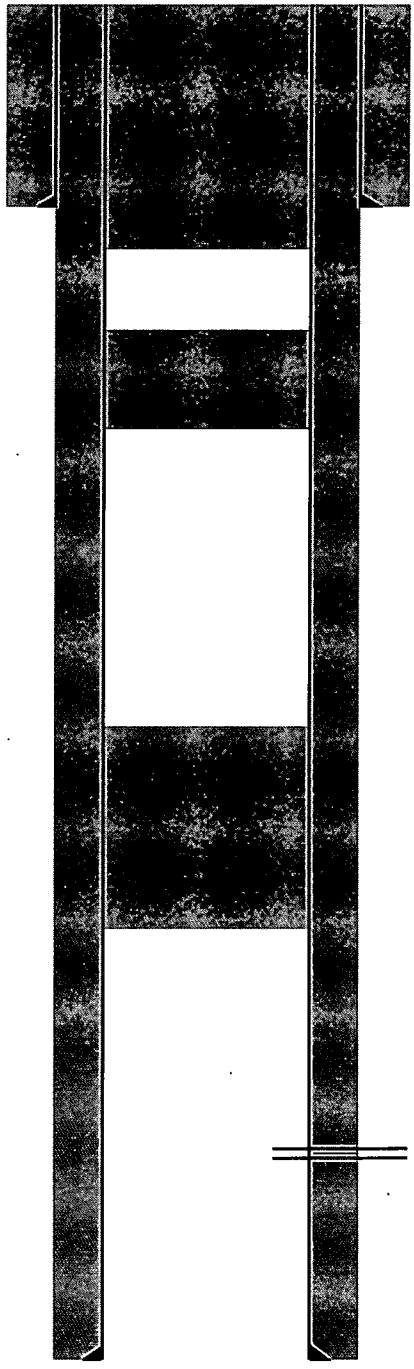
CURRENT WELLBORE SCHEMATIC

Operator	Northeast Loop Gas Company, L.P.
Well Name	Phillips-Goldstone #2
Well Location	
Calls	1674' FSL, 472' FEL
Unit	H
Section	26
Township	24S
Range	36E

10 sx cmt plug surf - 559'

25 sx cmt plug 872' - 1119'

50 sx cmt plug 2250' - 2954'
TOC tagged @ 2250'



Surface Casing

Hole Size (in)	12 1/4
Casing Size (in)	8 5/8
Casing Weight (ppf)	28
Setting Depth (ft):	486
Amount Cement (sx)	300
Top of Cement (ft)	0
TOC Method.	Circulated

Perforations

Top (ft)	3017
Bottom (ft)	3099

Production Casing

Hole Size (in)	7 7/8
Casing Size (in)	5 1/2
Casing Weight (ppf)	17
Setting Depth (ft).	3398
Amount Cement (sx)	700
Top of Cement (ft)	0
TOC Method	Circulated

Total Depth (ft) 3400

ATTACHMENT TO FORM C-108

Resaca Operating Co.
Cooper Jal Unit

Item VII – data on the proposed operation

1. The proposed average daily rate of injection is 600 STBD per well. The proposed maximum daily rate of injection is 2,000 STBD per well.

2. The system will be closed.

3. The table below lists the top anticipated perforation and proposed maximum injection pressure for each of the proposed injection wells.

Well	Depth to Top Perforation (ft)	Proposed Maximum Injection Pressure (psi)
CJU # 108	3000	600
CJU # 109	2972	590
CJU # 114	2978	595
CJU # 148	3018	600
CJU # 206	2983	595
CJU # 213	2995	595
CJU # 230	2976	595

4. Currently, all injected water is produced water from the Jalmat and Langlie Mattix Pools. Off-lease make-up water is obtained from several offset operators.

5. Not Applicable.

ATTACHMENT TO FORM C-108

Resaca Operating Co.
Cooper Jal Unit

Item IX – proposed stimulation program

All wells will be acidized, and/or fracture stimulated.

Affidavit of Publication

State of New Mexico,
County of Lea.

I, JUDY HANNA
PUBLISHER
of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period

of 1 issue(s).
Beginning with the issue dated
March 16, 2011
and ending with the issue dated
March 16, 2011

Judy Hanna
PUBLISHER

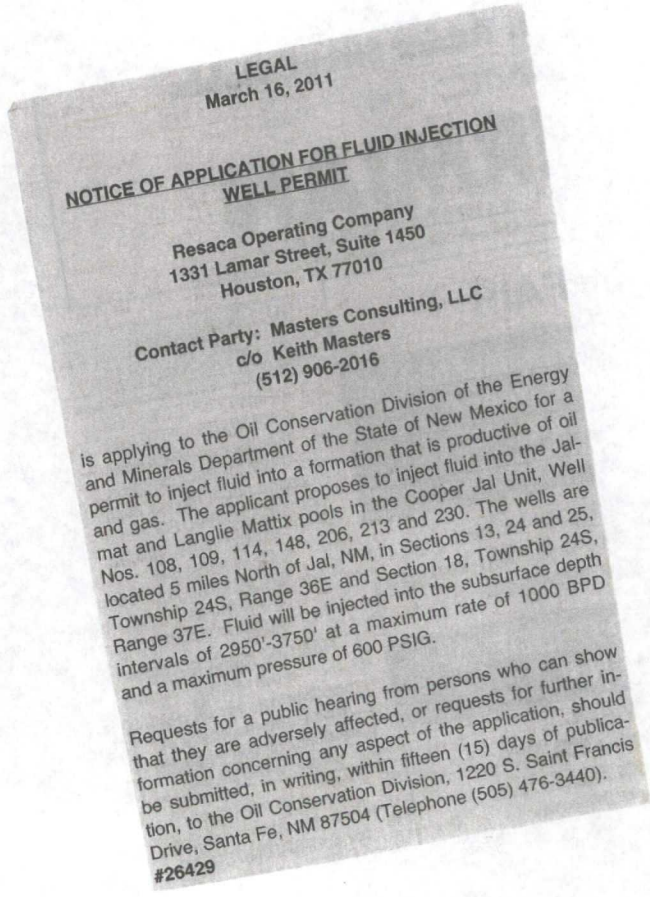
Sworn and subscribed to before me
this 22nd day of
March, 2011

Notary Public

My commission expires
February 09, 2013
(Seal)

OFFICIAL SEAL
DORA YANEZ
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: _____

This newspaper is duly qualified to publish legal notices or advertisments within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.



LEGAL
March 16, 2011

NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT

Resaca Operating Company
1331 Lamar Street, Suite 1450
Houston, TX 77010

Contact Party: Masters Consulting, LLC
c/o Keith Masters
(512) 906-2016

is applying to the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico for a permit to inject fluid into a formation that is productive of oil and gas. The applicant proposes to inject fluid into the Jalmat and Langlie Mattix pools in the Cooper Jal Unit, Well Nos. 108, 109, 114, 148, 206, 213 and 230. The wells are located 5 miles North of Jal, NM, in Sections 13, 24 and 25, Township 24S, Range 36E and Section 18, Township 24S, Range 37E. Fluid will be injected into the subsurface depth intervals of 2950'-3750' at a maximum rate of 1000 BPD and a maximum pressure of 600 PSIG.

Requests for a public hearing from persons who can show that they are adversely affected, or requests for further information concerning any aspect of the application, should be submitted, in writing, within fifteen (15) days of publication, to the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, NM 87504 (Telephone (505) 476-3440).
#26429

67106751 00069289

MASTERS CONSULTING, LLC
7500 RIALTO BLVD STE 180
AUSTIN, TX 78735

CERTIFICATE OF SERVICE

I hereby certify that completed copies of State of New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division Form C-108 were transmitted with a letter identifying the proposed injection wells and offering to provide a complete copy of the subject administrative application for expansion of the Cooper Jal Unit Waterflood Project in the Jalmat Pool, Lea County New Mexico, by registered mail, on the date indicated below, to the following affected parties:

Surface Owners :

Deep Wells Ranch, Inc.
Star Route 1, Box 244
Jal, NM 88252

Lea Partners
P.O. Box 4967
Houston, TX 77210

James R. Pruett
13120 Turtle Creek Dr.
Oklahoma City, OK 73170

RRR Land & Cattle Company
2205 Bedford Drive
Midland, TX 79701

Louis Q. Thomas
P.O. Box 4377
Huachuca City, AZ 85616

C.D. Woolworth Trust
Jal Public Library Fund
P.O. Box 178
Lal, NM 88252

Watkins Scholarship Trust
Attn: Mr. Rusty Phenix
188 S. Main St.
Henderson, TX 75653

Offset Operators :

Apache Corp.
303 Veterans Airpark Lane; Ste. 3000
Midland, TX 79705

Cameron Oil & Gas, Inc.
P.O. Box 1456
Roswell, NM 88202-1456

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

Enervest Operating, L.L.C.
1001 Fannin St.; Ste. 800
Houston, TX 77002

Fulfer Oil & Cattle
P.O. Box 1224
Jal, NM 88252

Range Operating New Mexico, Inc.
100 Throckmorton St.; Ste. 1200
Fort Worth, TX 76102

Others:

Bureau of Land Management
Attn: Mr. Wesley J. Ingram
620 E. Greene St.
Carlsbad, NM 88220

04/18/11

Keith B. Masters, P.E.

Warnell, Terry G, EMNRD

From: Michael Feldewert [MFeldewert@hollandhart.com]
Sent: Tuesday, May 24, 2011 10:30 AM
To: Warnell, Terry G, EMNRD; Brooks, David K., EMNRD
Cc: Ezeanyim, Richard, EMNRD
Subject: RE: Resaca Waterflood Expansion: BLM Objection

Will do. Thanks for accommodating my request.

From: Warnell, Terry G, EMNRD [mailto:TerryG.Warnell@state.nm.us]
Sent: Tuesday, May 24, 2011 10:10 AM
To: Michael Feldewert; Brooks, David K., EMNRD
Cc: Ezeanyim, Richard, EMNRD
Subject: RE: Resaca Waterflood Expansion: BLM Objection

Hello,

Mr. Hearing Examiner here

In order to accommodate everyone I would like to have the
Resaca WFX/BLM objection conference call at 3:30 pm today

Michael if you would be so kind as to call David and I at 476-3450 (David's Office) we will talk at 3:30

From: Michael Feldewert [mailto:MFeldewert@hollandhart.com]
Sent: Monday, May 23, 2011 5:09 PM
To: Brooks, David K., EMNRD
Cc: Warnell, Terry G, EMNRD
Subject: Resaca Waterflood Expansion: BLM Objection

I could also conference anytime in the afternoon if that is more convenient.

From: Michael Feldewert
Sent: Monday, May 23, 2011 5:03 PM
To: Michael Feldewert; 'Brooks, David K., EMNRD'
Cc: 'Warnell, Terry G, EMNRD'
Subject: RE: Resaca Waterflood Expansion: BLM Objection

Sorry – my bad. I meant at 10:00.

From: Michael Feldewert
Sent: Monday, May 23, 2011 5:02 PM
To: 'Brooks, David K., EMNRD'
Cc: Warnell, Terry G, EMNRD
Subject: Resaca Waterflood Expansion: BLM Objection

Got it. Can we conference at 11:00 tomorrow by telephone?

From: Brooks, David K., EMNRD [mailto:david.brooks@state.nm.us]
Sent: Monday, May 23, 2011 4:50 PM
To: Michael Feldewert

Cc: Warnell, Terry G, EMNRD
Subject: RE: Resaca Waterflood Expansion: BLM Objection

I do not know anything about this matter; so I assume we will also need Terry.

However, I am available tomorrow except 8:30 to 9:30 and 10:30 to 11:30.

David

From: Michael Feldewert [mailto:MFeldewert@hollandhart.com]
Sent: Monday, May 23, 2011 4:17 PM
To: Brooks, David K., EMNRD
Subject: Resaca Waterflood Expansion: BLM Objection

David: Do you a moment tomorrow to discuss by telephone the status of this administrative application? The question that I have is whether this matter case be addressed administratively if Resaca (the applicant) removes the three federal wells from consideration. None of the other operators have objected and Resaca is concerned about the delay associated with the BLM's rather general objection.

Will 11:00 tomorrow work for you?

-----Original Message-----
From: Warnell, Terry G, EMNRD [mailto:TerryG.Warnell@state.nm.us]
Sent: Tuesday, May 03, 2011 12:51 PM
To: Keith B. Masters, P.E.; melanie.reyes@teai.com
Subject: FW: Resaca Operating Company Waterflood Expansion

-----Original Message-----
From: Warnell, Terry G, EMNRD
Sent: Thursday, April 21, 2011 1:27 PM
To: 'wingram@blm.gov'
Cc: Ezeanyim, Richard, EMNRD
Subject: RE: Resaca Operating Company Waterflood Expansion

Hi Wesley,

I appreciate the information and your objection.
I do have an Administrative Application on my desk from Resaca It's a Water Flood Expansion for seven existing (P&A'd or TA'd) wells in the Cooper Jal Unit:

Cooper Jal Unit Well No. 108 30-025- Jalmat and Langlie Mattix Pools
Cooper Jal Unit Well No. 109 30-025- Jalmat Pool Only
Cooper Jal Unit Well No. 114 30-025-09559 Jalmat and Langlie Mattix Pools
Cooper Jal Unit Well No. 148 30-025-09642 Jalmat and Langlie Mattix Pools
Cooper Jal Unit Well No. 206 30-025-09621 Jalmat Pool Only
Cooper Jal Unit Well No. 213 30-025- Jalmat and Langlie Mattix Pools
Cooper Jal Unit Well No. 230 30-025-09649 Jalmat Pool Only

Starting back in 1993 OCD has approved four Water Flood Expansion for this unit WFX-648, WFX-657, WFX-671 and WFX-876.

I will let Resaca's agent Keith Master know that we have received an objection to their WFX application and said application has been denied. They do have the option to ask for a hearing. If Resaca sets a hearing date then you or one of your staff will need to testify at the hearing here in Santa Fe. I will let you know when that is if it happens.

Thanks again

Terry

-----Original Message-----
From: wingram@blm.gov [mailto:wingram@blm.gov]
Sent: Wednesday, April 20, 2011 6:23 PM
To: Warnell, Terry G, EMNRD
Subject: Resaca Operating Company Waterflood Expansion

Terry,

The BLM is objecting to the proposal to expand the waterflood due to previous history with projects operated by Range Operating, OXY and Devon where the injection created multiple problems. In addition, the cementing of these wellbores is questionable and it was similar well cement jobs that created the problems with water flows outside of the proposed injection zone for the other operators.

For your information, the operator has submitted Notice of Stakings on the three Federal wells. I do not know the status of the wells on the Fee leases, but it appears that APDs have been submitted. They did list these wells in their 2011 Unit Plan of Development.

If the operator can satisfy our objections on the waterflood expansion, the BLM will require a CBL to determine the actual cement situation behind the production casing with remedial work to be done as needed. In addition, they will be required to run Casing Integrity Tests.

If the diagrams attached to the proposal are accurate, the BLM will not be able to approve CO2 injection as there are too many possibilities for CO2 to impact other formations.
Also, these wellbores are probably indicative of the condition of the other wells in the field.

Has NMOCD approved the combination of these pools? I know that was a hearing item, but I don't know the outcome.

Please let me know if you have any questions regarding the objection.

Thanks,
Wesley W. Ingram