

ABOVE THIS LINE FOR DIVISION USE ONLY

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



227

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
 WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

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

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners**
- [B] ☐ Offset Operators, Leaseholders or Surface Owner**
- [C] ☐ Application is One Which Requires Published Legal Notice**
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO**
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,**
- [F] ☐ Waivers are Attached**

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

_____ Print or Type Name	_____ Signature	_____ Title	_____ Date
_____ e-mail Address			

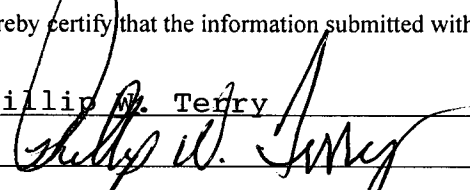
RECEIVED

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
DEC 13 2004 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT
DIVISION

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Arena Resources, Inc.
ADDRESS: 4920 S. Lewis, Suite 107, Tulsa, OK. 74105
CONTACT PARTY: Phillip W. Terry PHONE: 918-747-6060
- 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-11980-A
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Phillip W. Terry TITLE: Petroleum Engineer
SIGNATURE:  DATE: 11/22/04
E-MAIL ADDRESS: arenaresourcesok@aol.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: Information submitted in support of
Division Order No. R-11980-A approved November 14, 2003.

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

INJECTION WELL DATA SHEET

OPERATOR: Arena Resources, Inc.WELL NAME & NUMBER: East Hobbs San Andres Unit Well No. 011WELL LOCATION: 660' FSL, 2103' FWL

FOOTAGE LOCATION

N

UNIT LETTER

29

SECTION

18S

TOWNSHIP

39E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 11"Casing Size: 8 5/8"Cemented with: 485 sx. orft³Top of Cement: SurfaceMethod Determined: circulatedIntermediate Casing

Hole Size: _____

Casing Size: _____

Cemented with: _____ sx. orft³

Top of Cement: _____

Method Determined: _____

Production CasingHole Size: 7 7/8"Casing Size: 5 1/2" @ 4424'Cemented with: 750 sx. orft³Top of Cement: 1165Method Determined: Temp. SurveyTotal Depth: 4467Injection Interval4528 feet to 4613 Perfs

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: PVC

Type of Packer: Baker AD-1, internally plastic coated

Packer Setting Depth: 4490

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

Additional Data

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

If no, for what purpose was the well originally drilled? Production

2. Name of the Injection Formation: San Andres

3. Name of Field or Pool (if applicable): East Hobbs San Andres

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Original completion

4424'-4467' OH. 4" liner set 4323'-4688' with 50 sx cement. Perfs 4528-4613.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: The Seven Rivers is productive at about 3800'
and the Blinbry is productive at about 6400' in the area.

Elevation: 3603' KB (6' above GL)

ORIGINAL OPERATOR: Gulf Oil Corp.

SPUDDED: 11/14/51

IPP: 1212 BOPD & 571 MCFPD (GOR 471)

ARENA RESOURCES, INC.

EAST HOBBS SAN ANDRES UNIT #011

(FORMERLY CARRIE O. DAVIS #1)

660' FSL, 2103' FWL, SEC. 29, TWP 18S, Rge
39E, Lea County, N.M.

API NO.: 30-025-07943

11" HOLE

8-5/8", 28#, H-40 csg @ 508'

Cmt'd w/485 sx, circ'd 100 sx out surf.

7-7/8" HOLE

TOC @ 1165' by temp. svy

TREATMENT HISTORY:

12/51 Well came in natural from San Andres P1 open hole 4424'-4467'.

2/53 BHP svy (1543 psi @ 4407').

11/53 43-hr SI BHP svy (1391 psi @ 4407').

5/55 Put well on pump. P. 140 BOPD & 10 BWPD.

1/66 Acidized open hole 4424'-67' w/1,000 gals 15% NEFE HCl. P. 24 BOPD & 118 BWPD (prior prod. 11 BOPD & 59 BWPD).

6/97 Ran 4-3/4" bit, 12 - 3-1/2" DC's & 2-7/8" WS & deepened open hole 4467'-4697' using 10 ppg brine w/WL 10 & vis 32 in 10.5 hrs (WOB 12K, RPM 60 & PP 1000 psig). Ran OH logs (log TD 4693'). Dropped 2-3/8" x 29' mule shoe jt of tbg w/collar looking up & did not fish. Top of fish @ 4664'. Ran OH pkr & swab tested new open hole 4474'-4697'. Swbd 2.5 days & rec 372 BW w/no show of oil & strong gas. Put well on pump w/BPMA @ 4450' & SN @ 4417'. Ran 2" pump & 7/8" steel/1" FG rod string. Put on pump. P. 0 BOPD & 371 BWPD.

7/97 Rec tbg fish dropped in 6/97. While POH w/fish well unloaded oil out tbg. Ran 4", 11.6#, FL4S FJ csg liner from 4323'-4688'. Cmt'd w/50 sx C1 "H" w/3% KCl w/good circ. Did not pressure test liner. Ran GR/CCL log from PBTD 4683'-3000'. Perf'd 4513'-22', 4524'-38', 4542'-68' & 4576'-4628' (1 SPF, 105 holes). Swbd 1.5 days & rec 206 BW w/no show of oil or gas. Ran temp/RA tracer svy - indicated channels from liner top to 4510' & from 4600' to below PBTD. Set CR @ 4294' & cmt sqz'd w/200 sx to 2150 psig. DO to 4375', tstd liner top to 1,000 psig & leaked 35 psig in 15 min. DO cmt to 4630', tagged PBTD @ 4683' & retested liner to 1050 psig for 15 min OK. Made 5-1/2" & 4" csg scraper runs & spotted 250 gals 15% NEFE HCl. Re-perf'd 4528', 4536', 4544', 4550', 4557', 4565', 4578', 4582', 4590', 4595', 4602', 4606', 4609' & 4613' (14 holes). Left 10' strip gun & CCL in hole - did not fish. Swbd 40 BF, 1-2% oil w/good gas blow. Est. FE 6.5 BPH. Put well on pump. P. 5 BOPD, 4 MCFPD & 81 BWPD.

9/97 Prep for WO to stim. 8-5/8" surf csg collapsed near surf. Repaired w/concrete in cellar. Attempted to run PPI pkr assembly & could not get thru liner top. RIH w/pkr & acidized perfs 4528'-4613' w/750 gals 15% NEFE HCl @ 0.5 BPM & 1200-2500 psig using 28 BS. Had some ball action. ISIP 1310 psig, 5 min vac. Put well on pump. P. 22 BOPD, 11 MCFPD & 212 BWPD.

5-1/2", 15.5#, J-55 LT&C csg @ 4424'

Cmt'd w/750 sx in 2 stgs, DV tool @ 1896'
(200 sx on 2nd stg), TOC @ 1165' by TS

4-3/4" hole

PBTD 4683', TD: 4697'

PROPOSED CONVERSION TO WATER INJECTION
OCTOBER, 2004

4", 11.6#, J-55, FL4S FJ csg liner 4323'-4688', cmt'd w/50 sx

Original San Andres P1 open hole 4424' - 4467', P1 zone
was cored - for interval 4458'-67' the ave. porosity was
12.9% w/ave. permeability 354 md

Current San Andres P2-P4 perfs in 4" liner 4528'-4613',
14 holes

PREPARED BY: PWT 9/30/04

TUBING RECORD:

Lined Tubing with lined packer at 4490

To be installed 10/04

ROD STRING RECORD:

PUMP RECORD:

PUMPING UNIT:

INJECTION WELL DATA SHEET

OPERATOR: Arena Resources, Inc.WELL NAME & NUMBER: East Hobbs San Andres Unit Well No. 021WELL LOCATION: 1983' FNL, 661' FEL
FOOTAGE LOCATIONUNIT LETTER H

30

SECTION

18S

TOWNSHIP

39E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 12 1/4"Casing Size: 9 5/8"Cemented with: 1400 sx. or ft³Top of Cement: SurfaceMethod Determined: circulatedIntermediate CasingHole Size: Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Production CasingHole Size: 8 3/4"Casing Size: 7 5/8"Cemented with: 400 sx. or ft³Top of Cement: NAMethod Determined: NATotal Depth: 4470'Injection IntervalPerfs P2-P3-P4 feet to

(Perforated or Open Hole; indicate which)

CIBP will be drilled and well deepened to 4650' San Andres P4. 4 1/2" csg. will be cemented at TD, and San Andres P2-P3-P4 perforated for injection.

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: PVC

Type of Packer: Baker AD-1, internally plastic coated

Packer Setting Depth: 4500'

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

Additional Data

1. Is this a new well drilled for injection? Yes X No
- If no, for what purpose was the well originally drilled? Production

2. Name of the Injection Formation: San Andres P2-P3-P4
3. Name of Field or Pool (if applicable): East Hobbs San Andres
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. original completion
San Andres P1 4445'-4468' OH. CIBP set @ 4439'. Current completion is
Grayburg perfs 4396'-4433'.
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: The Seven Rivers is productive at about 3800' and
the Blinbrey is productive at about 6400' in the area.

Elevation: 3612' KB (10' above GL)

ORIGINAL OPERATOR: Texaco

SPUDDED: 4/12/53

IPP: 628 BOPD

ARENA RESOURCES, INC.

East Hobbs San Andres Unit #021

Formerly D.F. Ferguson #1

1983' FNL, 661' FEL, SEC. 30, TWP 18S, Rge
39E, Lea County, N.M.

API NO.: 30-025-07954

12-1/4" HOLE
9-5/8", 36# csg @ 1899'
Cmt'd w/1400 sx to surf.

8-3/4" HOLE

TREATMENT HISTORY:

5/53: Completed in San Andres P1 zone 4445'-4468', 4 SPF. Acidized w/500 gals 15% MCA.

1/92: CO fill 4402'-68' w/6-3/4" bit & bailer. Tight spot in 7-5/8" csg 3712'-3850'. Fill was heavy scale. RIH w/prod tbg. Made 1 swab run w/FL @ 3300' FS (est. BHP 510 psi). Put back on pump.

5/97: Made 6-1/4" bit & csg scraper run to 4461' & tagged btm. Ran CNL log from 4454'-3800' (top of FL). Set CIBP @ 4439'. Perf'd Grayburg 4396'-4403', 4405'-14' & 4417'-33' w/1 SPF (35 holes). Spotted 250 gals 15% FE anti-sludge HCl at perfs. BD perfs @ 1300 psig & 1.2 BPM. Acidized w/add'l 1,000 gals 15% FE anti-sludge HCl & 70 BS @ 4 BPM on vac. No ball action. RU swab w/FL @ 3600' FS. Swbd trace of oil w/FL staying @ 3600' FS. Put well on pump w/SN @ 4402'. P. 3 BOPD, 127 MCFPD & 287 BWPD after 2 weeks on pump.

7-5/8", 26.4# csg @ 4470'
Cmt'd w/400 sx

TUBING RECORD:

2-7/8" @ 4431', SN @ 4402' & TAC @ 4241'

ROD STRING RECORD:

1-1/4" x 22' PR, 1 - 1" x 4' sub, 1 - 1" API grade D rod, 2400' (64) 1.2" Fibertex FG rods, 1600' (64) 1" API grade D rods & 300' (12) 1.25" K-bars

PUMP RECORD:

2-1/2" x 2" x 16' RWBC w/1-1/4" x 12' GA

PUMPING UNIT:

Lufkin C160-143-64 unit w/40 HP elec mtr,
12.85 x 64" SPM as of 7/10/03
Running 100% on

Proposed Conversion To WIW

11/04 Drill out CIBP with air/foam, Deepen to 4650 San Andres P4,

Run 4 1/2 casing and cement, perforate

San Andres P2-P3-P4, run packer and lined tubing, MIT, commence injection into

San Andres P2-P3-P4.

Grayburg perfs 4396'-4403', 4405'-4414' & 4417'-4433',
1 SPF (35 holes)

CIBP @ 4439'

San Andres perfs 4445' - 4468' (P1 zone)

Orig. PBTD: 4469'

TD: 4470'

PREPARED BY: PWT 10/7/04

INJECTION WELL DATA SHEET

OPERATOR: Arena Resources, Inc.WELL NAME & NUMBER: East Hobbs San Andres Unit Well No. 091WELL LOCATION: 330' FNL, 2310' FEL B 31 18S 39E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2" Casing Size: 10 3/4"
Cemented with: 200 sx. or ft³
Top of Cement: Method Determined: _____Intermediate CasingHole Size: Casing Size: _____
Cemented with: sx. or ft³
Top of Cement: Method Determined: _____Production CasingHole Size: 8 3/4" Casing Size: 7"
Cemented with: 400 sx. or ft³
Top of Cement: NA Method Determined: NATotal Depth: 4464'Injection IntervalP2-P3-P4 feet to 4600' ± perfs

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: PVC

Type of Packer: Baker AD-1, internally plastic coated

Packer Setting Depth: 4500'

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

Additional Data

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

If no, for what purpose was the well originally drilled? Production

2. Name of the Injection Formation: San Andres

3. Name of Field or Pool (if applicable): East Hobbs San Andres

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Original completion 4435' - 4464' OH. Propose to drill through P4 at about 4650' and set cement 4 1/2" csg., perforate P2-P3-P4 and place on injection after acidizing.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: The Seven Rivers is productive at about 3800' and the Blinbry is productive at about 6400' in the area.

Elevation: 3604' KB (10.6' AGL)

ARENA RESOURCES, INC.

East Hobbs San Andres Unit #091

Formerly Pearl Goode #1

SEC. 31, TWP 18S, Rge 39E, Lea County, N.M.

API NO.: 30-025-07960

ORIGINAL OPERATOR: Velma Petr. Corp.

SPUDDED: 6/26/53

IPP: 384 BOPD

17-1/2" HOLE

10-3/4" csg @ 334'

Cmt'd w/200 sx

8-3/4" HOLE

TREATMENT HISTORY:

7/53 Acidized open hole 4435' - 4452' w/1,000 gals 15% HCl in 2 jobs.

12/95 CO fish (csg pump) to 4464' & put back on pump.

LAST PULL:

7" csg @ 4435'

Cmt'd w/400 sx in 2 stgs, DV tool @ 1876'

TD: 4464'

TUBING RECORD:

2-3/8", unanchored w/SN @ 4400'

ROD STRING RECORD:

4381' of 3/4" API grade D

PUMP RECORD:

2" x 1-1/2" x 12'

PUMPING UNIT:

Sentry C114-173-54 unit w/Marathon 25 HP elec mtr,
13.35 x 54" SPM as of 6/25/03

Proposed Conversion to WIW

1/05 Drill through San Andres P4 to 4650 using air/foam, set and cement 4 1/2 casing from 4650 to surface, perforate P2-P3-P4 and acidize.

Run packer and lined tubing, MIT, commence injection.

San Andres open hole 4435' - 4464' (P1 zone)

PREPARED BY: PWT 10/7/04

INJECTION WELL DATA SHEET

OPERATOR: Arena Resources, Inc.WELL NAME & NUMBER: East Hobbs San Andres Unit Well No. 111WELL LOCATION: 990' FWL, 1650' FSLFOOTAGE LOCATION L 30 18S 39E
UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 11" Casing Size: 8 5/8"Cemented with: 900 sx. or ft³Top of Cement: Surface Method Determined: circulatedIntermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. or ft³

Top of Cement: _____ Method Determined: _____

Production CasingHole Size: 7 7/8" Casing Size: 5 1/2" @ 4449'Cemented with: 200 sx. or ft³Top of Cement: NA Method Determined: NATotal Depth: 4698'Injection Interval4449 feet to 4650 OH

(Perforated or Open Hole; indicate which)
Open hole will be plugged back from 4698' to 4650'
with sand capped with cement.

INJECTION WELL DATA SHEETTubing Size: 2 3/8" Lining Material: PVCType of Packer: Baker AD-1, internally plastic coatedPacker Setting Depth: 4410

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

Additional Data1. Is this a new well drilled for injection? _____ Yes X No _____If no, for what purpose was the well originally drilled? Production2. Name of the Injection Formation: San Andres P1-P43. Name of Field or Pool (if applicable): East Hobbs (San Andres)4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Original open hole interval 4449'-4698' will be plugged back to 4650' with a cement cap.5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: The Seven Rivers is productive at about 3800' and the Blinbry is productive at about 6400' in the area.

Elevation: ' GL

ARENA RESOURCES, INC.

EAST HOBBS SAN ANDRES UNIT #111

(FORMERLY ROCKET CAIN #1)

SEC. 30, TWP 18S, Rge 39E, Lea County, N.M.

API NO.: 30-025-07948

ORIGINAL OPERATOR:

SPUDDED: 9/20/53

IPP: 952 BOPD

11" HOLE

8-5/8", 24#, J-55 ST&C csg @ 1788'

Cmt'd w/

7-7/8" HOLE

TREATMENT HISTORY:

PLUG BACK OPEN HOLE FROM 4698 TO 4650 WITH SAND CAPPED WITH CEMENT

TUBING RECORD:

2 3/8 lined tubing with lined packer

Packer Depth 4410

ROD STRING RECORD:

PUMP RECORD:

PUMPING UNIT:

LAST PULL:

5-1/2", 15.5#, J-55 LT&C csg @ 4449'

Cmt'd w/

TD: 4698'

San Andres open hole 4449' - 4698 P1-P5 Interval

Open hole will be plugged back to 4650 with sand /cement

PREPARED BY: PWT 9/30/04

INJECTION WELL DATA SHEET

OPERATOR: Arena Resources, Inc.WELL NAME & NUMBER: East Hobbs San Andres Unit Well No. 126WELL LOCATION: 1650' FSL, 2310' FWL
FOOTAGE LOCATIONUNIT LETTER KSECTION 30TOWNSHIP 18SRANGE 39EWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 12 1/4" Casing Size: 8 5/8"Cemented with: 825 sx. or ft³Top of Cement: Surface Method Determined: circulatedIntermediate CasingHole Size: Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Production CasingHole Size: 7 7/8" Casing Size: 5 1/2"Cemented with: 585 sx. or ft³Top of Cement: 2500' Method Determined: CBLTotal Depth: 4625'Injection Interval4450 feet to 4614

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2 3/8" Lining Material: PVCType of Packer: Baker AD-1, internally plastic coatedPacker Setting Depth: 4485'Other Type of Tubing/Casing Seal (if applicable): Additional Data1. Is this a new well drilled for injection? Yes X NoIf no, for what purpose was the well originally drilled? Production2. Name of the Injection Formation: San Andres P1-P2-P3-P43. Name of Field or Pool (if applicable): East Hobbs San Andres4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: The Seven Rivers is productive at about 3800' and the Blinbry is productive at about 6400' in the area.

Elevation: 3612' KB

ARENA RESOURCES, INC.

EAST HOBBS SAN ANDRES UNIT #126

(FORMERLY SAMUEL CAIN #6)

SEC. 30, TWP 18S, Rge 39E, Lea County, N.M.

API NO.: 30-025-34610

ORIGINAL OPERATOR: EnerQuest

SPUDDER: 5/28/99

IPP: 15 BOPD, 13 MCFPD & 92 BWPD

12-1/4" HOLE

8-5/8", 24# csg @ 1918'

Cmt'd w/825 sx to surf.

TOC @ 2500' by CBL

7-7/8" HOLE

TREATMENT HISTORY:

6/99 Ran CBL from PBTD 4622'-3000'. Good bond across pay. Perf'd P-4 zone 4574'-80', 4592'-96', 4601'-05' & 4609'-14' (23 holes). Spotted acid, attempted to acidize using PPI pkr & could not BD perfs @ 3000 psig. Re-perf'd same P-4 interval (23 holes). Acidized w/1,300 gals 15% NEFE HCl as follows: 4609'-14' treated w/6 bbls acid @ 0.5 BPM & 1030 psig, 4601'-05' treated w/4 bbls acid @ 0.1 BPM & 1400 psig, 4592'-96' treated w/7 bbls acid @ 0.5 BPM & 1400 psig & 4574'-80' treated w/14 bbls acid @ 0.7 BPM & 1600 psig. Swbd 126 BF, 7-10% oil w/FL 4000' FS. Perf'd P-3 zone 4531'-38', 4543'-49', 4554'-58' & 4561'-65' (25 holes). Set RBP @ 4570'. Acidized 4531'-65' w/1,250 gals 15% NEFE HCl @ 1.6 BPM & 2400 psig w/good ball action (ISIP 2200 psig). Swbd 105 BF, 5-7% oil (45 BF over load). Rec RBP. Put well on pump. P. 11 BOPD, 10 MCFPD & 96 BWPD.

7/99 Perf'd P-2 zone 4505'-12' (8 holes). Set RBP @ 4525'. Acidized 4505'-12' w/500 gals 15% NEFE HCl on vac. Swbd 34 BLW, 2-5% oil w/FL @ SN. 56 BLWTR. Rec RBP. Put well on pump.

10/04 Perf P1 zone 4450-70, 2 spf, 40 holes, acidized with 2000 gal 15% NEFE, put on pump, pumped 2 bo + 162 bw + 3 mcf from P1-P2-P3-P4.

5-1/2", 15.5#, J-55 LT&C csg @ 4625'

Cmt'd w/585 sx, TOC @ 2500' by CBL

TUBING RECORD:

2-7/8" w/TAC @ 4369' & SN @ 4662'

ROD STRING RECORD:

7/8" x 6' API grade D sub, 1837.5' of 1" FG, 1325' of 7/8" API grade D & 1477' of 3/4" API grade D rods

PUMP RECORD:

2-1/2" x 1-1/2" x 16'

PUMPING UNIT:

Churchill C228-173-100 unit w/Econo-pac size 2 elec mtr,

11.36 x 86" SPM, running 60% on as of 6/16/03

San Andres perfs 4505' - 4614' (P2 - P4 zones, 79 holes)

San Andres perfs 4450-4470, (P1 Zone) added 10/04.

PBTD: 4622'

TD: 4625'

PREPARED BY: PWT 11/17/04

ARENA RESOURCES, INC. - TABULATION OF DATA ON WELLS IN REVIEW AREA - APPLICATION FOR AUTHORIZATION TO INJECT

OPERATOR NAME	LEASE NAME	Well	Status	Unit	Sec	Twp	Rng	SPUD DATE	Driller	TD	PBTD	Surface Casing			Intermediate Casing			Production Casing			Upper Perf	Lower Perf	Reservoir
												Size In.	Depth	Cement ex C I C	Size In.	Depth	Cement ex C I C	Size In.	Depth	Cement ex C I C			
Valina Petroleum	Bowers Fed	1 P&A	I	25	18	39		12/27/1983	4,483			8.825	1,895	900	5,500	4,428	120	4,475	4,483	San Andres			
Carper Drilling	Bowers Fed	2 D&A	P	25	18	39		7/21/1994	4,513			8.825	1,890	1,000	5,500	4,478	120	4,478	4,513	San Andres			
Phillips Pet El AI	Browning	1 D&A	E	29	18	39		8/26/1983	4,484			8.825	1,808	1,250	7,000	4,460	625						
Aurora Gasoline Co	Charles Browning	1 P&A	E	28	18	39		11/5/1983	4,482			8.825	1,735	800	5,500	4,442	200	4,442	4,482	San Andres			
Textand Petroleum Inc.	Davis	1 OIL	K	28	18	39		2/18/1983	4,458			13.375	275	200	8.825	1,868	300						
Arena Resources Inc.	Davis CO	2 OIL	L	28	18	39		6/5/1983	4,088			8.825	498	550	5,500	4,419	1,850	4,419	4,458	San Andres			
Arena Resources Inc.	Davis Carrie O	3 T/A	M	28	18	39		7/4/1983	4,471	4,419		8.825	502	500	5,500	4,421	1,150	4,421	4,471	San Andres			
Arena Resources Inc.	Davis Carrie O	5 OIL	M	28	18	39		6/17/1987	4,710	4,688		8.825	1,820	775	5,500	4,710	615	4,488	4,645	San Andres			
Antithon David H Oil & Gas Inc.	Davis Carrie O	4 OIL	N	28	18	39		7/2/1987	6,500	6,488		8.825	1,880	1,200	5,500	6,500	1,800	6,370	6,423	Blindbry			
Arena Resources Inc.	Davis CO	1 OIL	N	28	18	39		11/4/1981	4,897			8.825	508	465	4,500	4,424	750	4,424	4,897	San Andres			
Textand Petroleum Inc.	Davis	1 OIL	O	28	18	39		12/13/1985	4,448			8.825	1,871	860	5,500	4,448	1,350	6,317	6,418	Blindbry			
Antithon David H Oil & Gas Inc.	Davis	1 OIL	O	28	18	39		8/16/1981	4,465			7.825	3,133	1,350	5,500	4,448	175	4,449	4,465	San Andres			
Rice Engineering Corp.	Samuel E Cain	2 OIL	J	30	18	39		10/27/1981	6,433			10.375	1,866	850	6,500	6,388	500	6,380	6,433	Blindbry			
Maritindale Corporations	Ferguson DF	1 SVD	F	30	18	39		6/8/1983	4,475			8.825	1,895	900	7,000	4,474	1,200	4,462	4,474	San Andres			
Arena Resources Inc.	Ferguson DF	2 P&A	G	30	18	39		6/18/1983	4,470	4,468		9.825	1,907	1,400	7,000	4,470	450	4,452	4,472	San Andres			
Arena Resources Inc.	Larney Reese	1 OIL	H	30	18	39		4/12/1983	4,470	4,439		8.825	1,910	1,400	7,825	4,470	400	4,386	4,433	San Andres			
Arena Resources Inc.	Larney Reese	2 OIL	I	30	18	39		7/18/1983	4,463			7.825	1,728	800	5,500	4,410	200	4,410	4,463	San Andres			
Arena Resources Inc.	Larney Reese	3 OIL	I	30	18	39		6/8/1989	4,615	4,610		8.825	1,820	775	5,500	4,515	595	4,571	4,601	San Andres			
Arena Resources Inc.	Larney	1 OIL	J	30	18	39		7/1/1983	4,445			8.825	1,811	825	5,500	4,627	585						
Arena Resources Inc.	Larney	1 OIL	J	30	18	39		7/1/1983	4,445			8.825	1,818	720	5,500	4,390	500	4,390	4,445	San Andres			
Hanson Oil Corp.	Larney	1 OIL	J	30	18	39		10/13/1988	4,623	4,618		8.825	1,830	830	5,500	4,615	485	4,588	4,610	San Andres			
Stevens Donald G	Vierman	1 D&A	J	30	18	39		1/14/1970	7,612			13.375	344	375	9.825	3,150	150						
Arena Resources Inc.	Samuel E Cain	1 D&A	K	30	18	39		12/30/1972	10,240			8.825	1,818	825	5,500	4,626	585	4,531	4,614	San Andres			
Exxon Corporation	Samuel E Cain	2 P&A	K	30	18	39		8/23/1983	4,479	4,466		8.825	1,898	900	5,500	4,478	1,200	4,450	4,482	San Andres			
Hanson Oil Corp.	Samuel E Cain	1 D&A	N	30	18	39		1/14/1970	3,200			8.825	1,880	725	5,500	4,718	615	4,480	4,578	San Andres			
Arena Resources Inc.	Samuel E Cain	5 OIL	N	30	18	39		6/24/1987	4,722	4,583		8.825	1,860	725	4,500	3,850	250	4,441	4,463	San Andres			
Western Reserves Oil	Chaparral	1 D&A	N	30	18	39		2/9/1976	3,560			8.825	364	275	4,500	3,850	250	4,441	4,463	San Andres			
Exxon Corporation	Samuel E Cain	3 P&A	N	30	18	39		8/27/1983	4,465			7.825	1,803	800	5,500	4,465	1,100	4,405	4,455	San Andres			
Arena Resources Inc.	Larney	2 OIL	O	30	18	39		8/12/1983	4,455			8.825	1,800	800	5,500	4,405	500	4,405	4,455	San Andres			
Arena Resources Inc.	Larney	4 OIL	O	30	18	39		8/14/1974	3,831	3,825		8.825	361	250	4,500	3,827	200	3,784	3,788	San Andres			
Arena Resources Inc.	Larney	2 OIL	O	30	18	39		6/20/1989	4,615	4,610		8.825	1,825	825	5,500	4,615	485	4,489	4,603	San Andres			
Arena Resources Inc.	Larney	3 OIL	P	30	18	39		8/27/1983	4,459			8.825	1,825	800	5,500	4,406	500	4,405	4,458	San Andres			
Arena Resources Inc.	Larney	3 OIL	P	30	18	39		8/27/1983	4,459			8.825	1,820	800	5,500	4,423	485	4,578	4,607	San Andres			
Antihill Morris R	Vierman	1 D&A	P	30	18	39		4/26/2000	4,626	4,612		8.825	1,870	845	5,500	4,623	485	4,578	4,607	San Andres			
Arena Resources Inc.	Pearl Goode	2 OIL	A	31	18	39		8/24/1983	4,459			7.825	1,830	700	7,000	4,430	200	4,430	4,459	San Andres			
Arena Resources Inc.	Pearl Goode	1 OIL	B	31	18	39		8/28/1983	4,452			10.750	333	200	7,000	4,435	400	4,435	4,452	San Andres			
Arena Resources Inc.	Pearl Goode	3 OIL	C	31	18	39		9/18/1983	4,502			8.825	325	200	5,500	4,424	250	4,424	4,459	San Andres			
Standard Oil Co.	Pearl Goode	1 P&A	G	31	18	39		1/31/1982	6,525			8.825	484	350	5,500	4,502	400	4,459	4,465	San Andres			
Arena Resources Inc.	Lowe State	1 OIL	C	32	18	39		7/23/1983	4,470			7.875	1,902	400	5,500	4,424	250	4,424	4,470	San Andres			
Arena Resources Inc.	Lowe State	2 OIL	D	32	18	39		9/28/1983	4,468			8.825	1,854	700	5,500	4,421	200	4,421	4,468	San Andres			

Check

ARENA RESOURCES, INC. - TABULATION OF DATA ON WELLS IN REVIEW AREA - APPLICATION FOR AUTHORIZATION TO INJECT

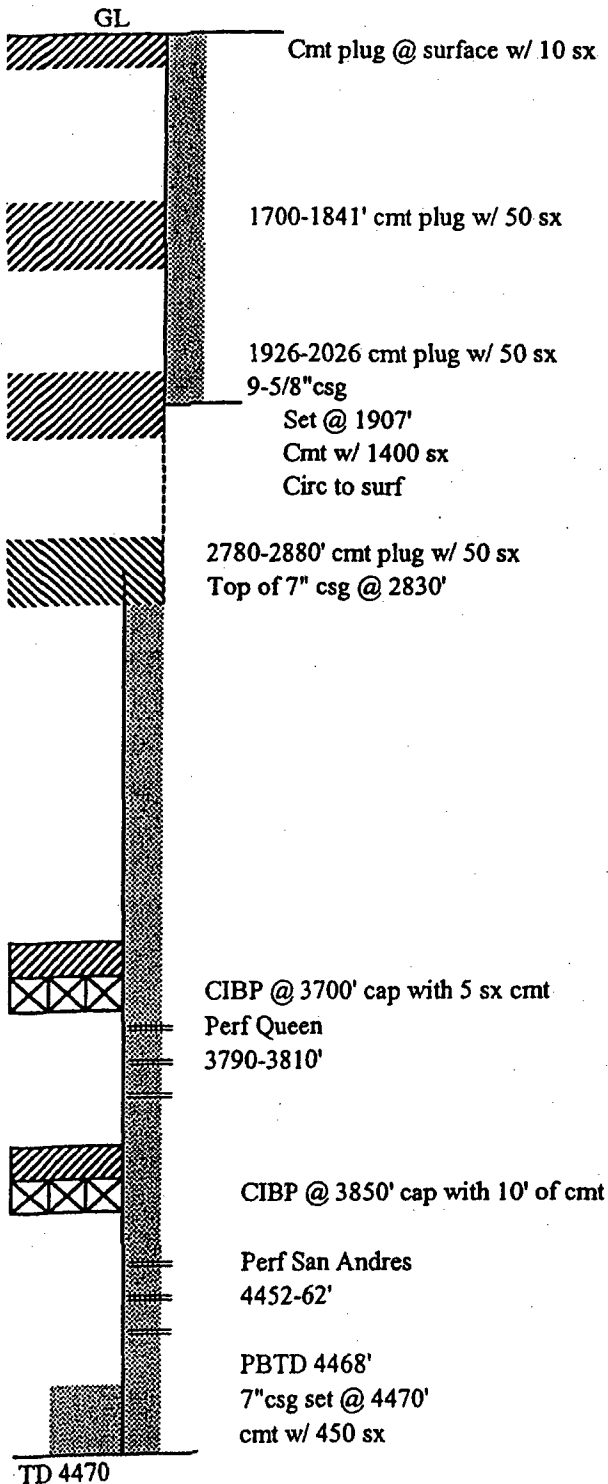
[illegible]

- d/c
- Ched - o/c
- Chetm
))
))
))

5350

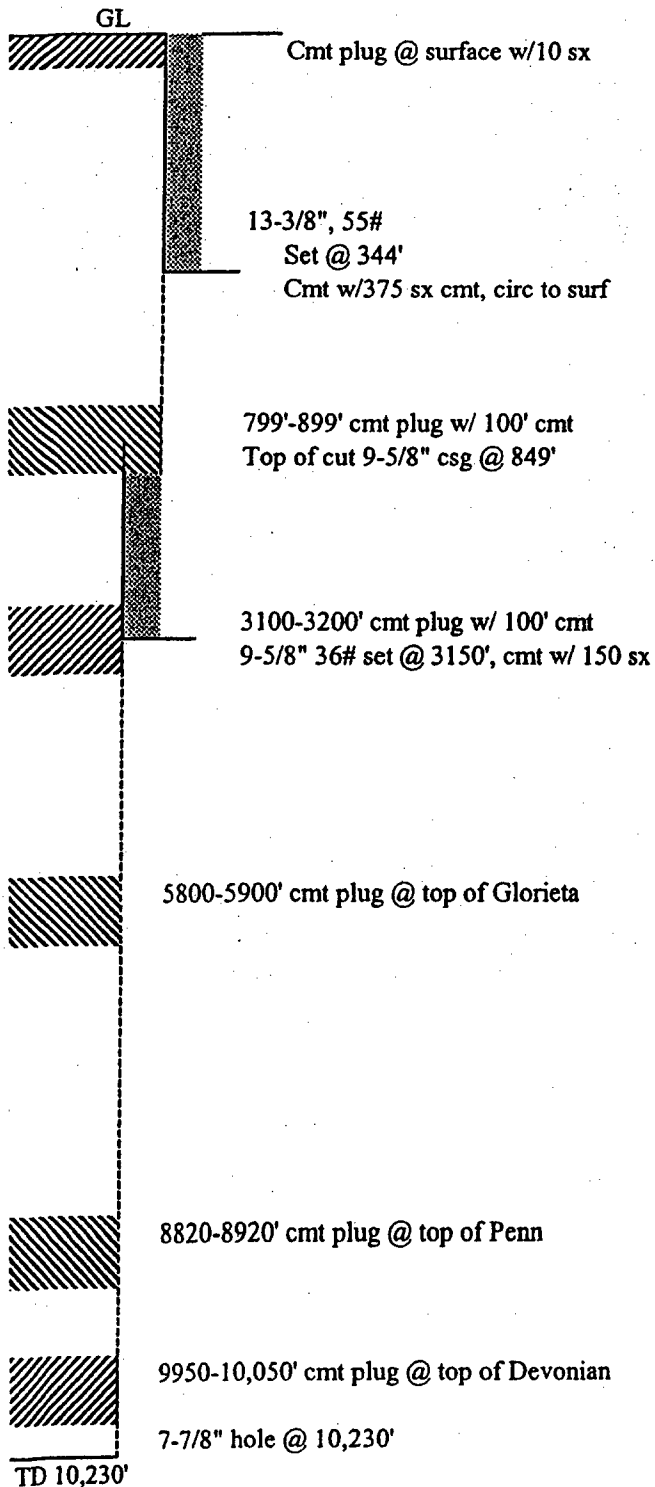
WELLBORE SCHEMATIC☐ Proposed☒ Actual

Well Name & No.: D. F. FERGASON #2 Operator: MARTINDALE CORP.
Location: UNIT G, SEC. 30, T-18-S, R-39-E
County: LEA State: NM API #: 30-025-07955
GR Elev: 3613' + KB of ft = 0 ft KB Elevation

**WELL HISTORY:**

Spud 5/18/1953
Rig Rlse. P&A'd well 6/22/74

Plugging Information is from State Reports.

WELLBORE SCHEMATIC☐ Proposed☒ ActualWell Name & No.: VIERSEN #1-XOperator: DONALD G. STEVENSLocation: 1955' FSL & 1930' FEL, UNIT "J", SEC. 30, T-18-S, R-39-ECounty: Lea State: NM API #: 30-025-23420GR Elev: 3,606 + KB of _____ ft = 3,606 ft KB Elevation**WELL HISTORY:**

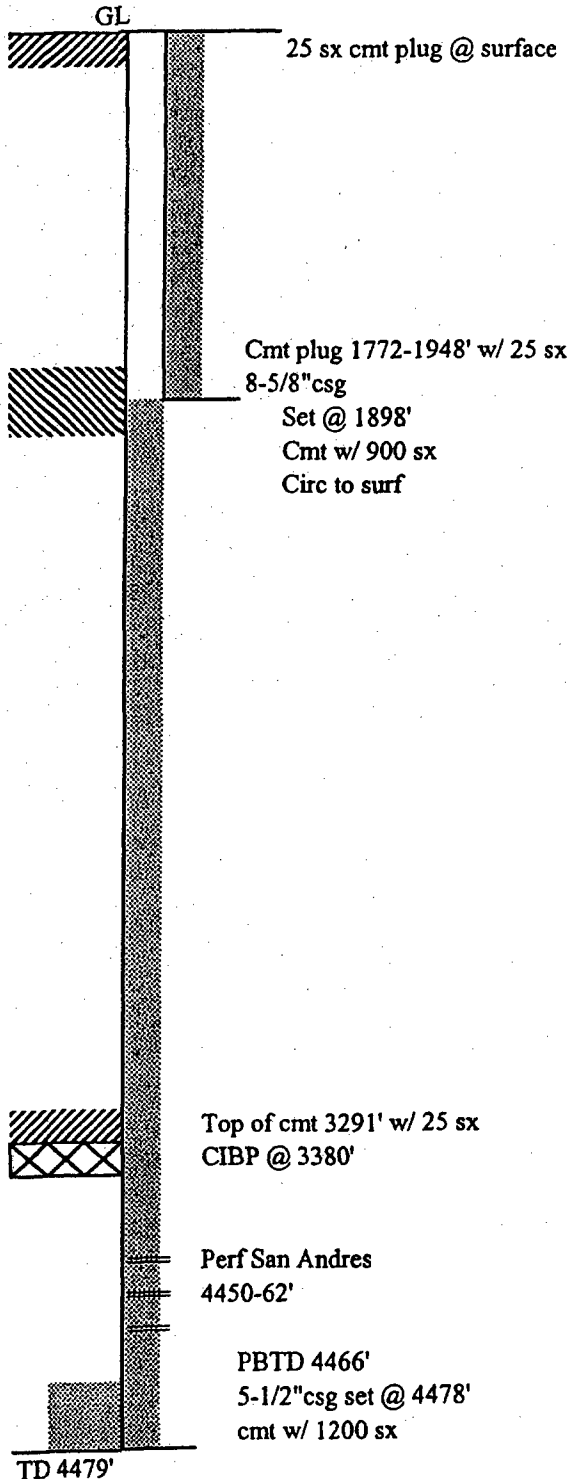
Spud 1/14/70

Rig Rlse. P&A'd well - 4/30/73

Plugging Information is from State Reports.

WELLBORE SCHEMATIC☐ Proposed☒ Actual

Well Name & No.: SAMUEL E. CAIN #2 Operator: EXXON CORPORATION
Location: UNIT K, SEC. 30, T-18-S, R-39-E
County: LEA State: NM API #: 30-025-07951
GR Elev: 3616' + KB of ft = 0 ft KB Elevation

**WELL HISTORY:**

Spud 8/3/1953
Rig Rlse. P&A'd well 11/3/85

Plugging Information is from State Reports.

WELLBORE SCHEMATIC☐ Proposed☒ Actual

Well Name & No.:

CAIN #1

Operator: HANSON OIL COMPANY

Location:

990' FSL & 2310 FWL, UNIT "N", SEC. 30, T-18-S, R-39-E

County:

Lea

State:

NM

API #:

30-025-23421

GR Elev:

3,601

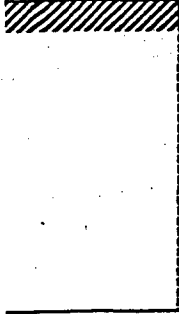
+ KB of

ft =

3,601

ft KB Elevation

GL



Cmt plug @ surface w/10 sx

WELL HISTORY:

Spud

1/15/70

Rig Rise.

P&A'd well - 2/20/70

Plugging Information is from State Reports.

WELL BORE SCHEMATIC

☐ Proposed

☒ Actual

Well Name & No.:

CHAPPARRAL #1

Operator: WESTERN RESERVES OIL COMPANY

Location:

2310' FWL & 660 FSL, UNIT "N", SEC. 30, T-18-S, R-39-E

County:

Lea

State:

NM

API #:

30-025-24966

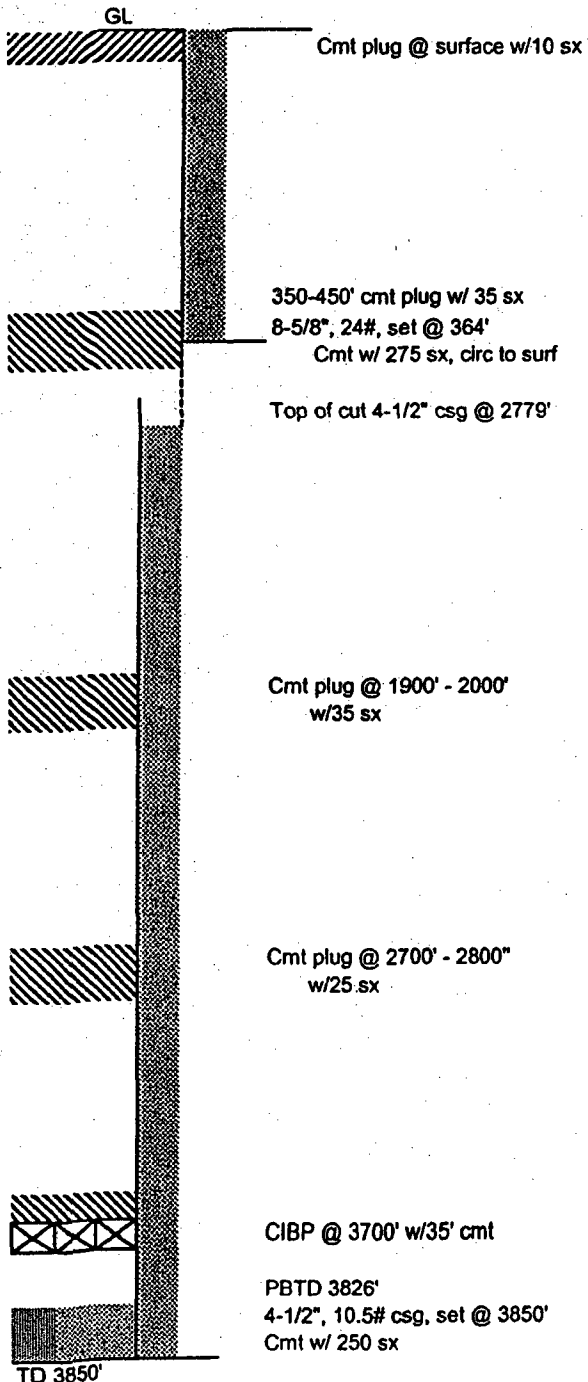
GR Elev:

3,610 + KB of

10

ft =

3,620 ft KB Elevation



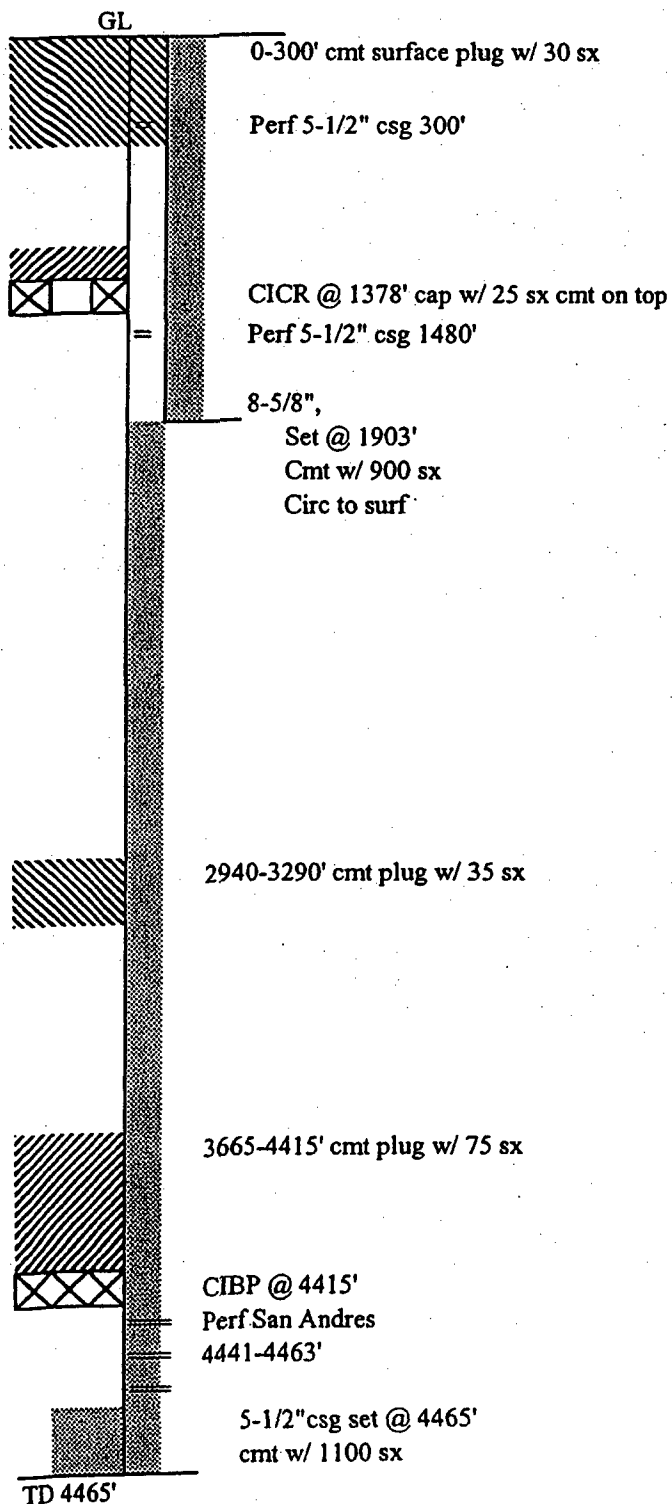
WELL HISTORY:

Spud 2/6/75
Rig Rise. P&A'd well - 3/1/75

Plugging Information is from State Reports.

WELLBORE SCHEMATIC☐ Proposed☒ Actual

Well Name & No.: SAMUEL E. CAIN #3 Operator: EXXON CORPORATION
Location: UNIT N, SEC. 30, T-18-S, R-39-E
County: LEA State: NM API #: 30-025-07952
GR Elev: 3600' + KB of ft = 0 ft KB Elevation

**WELL HISTORY:**

Spud 8/27/1953
Rig Rlse. P&A'd well 5/23/87

Plugging Information is from State Reports.

WELLBORE SCHEMATIC

☐ Proposed

☒ Actual

Well Name & No.:

VIERSEN #1

Operator: MORRIS R ANTWEIL

Location:

990' FSL & 330' FEL, UNIT "P", SEC. 30, T-18-S, R-39-E

County:

Lea

State:

NM

API #:

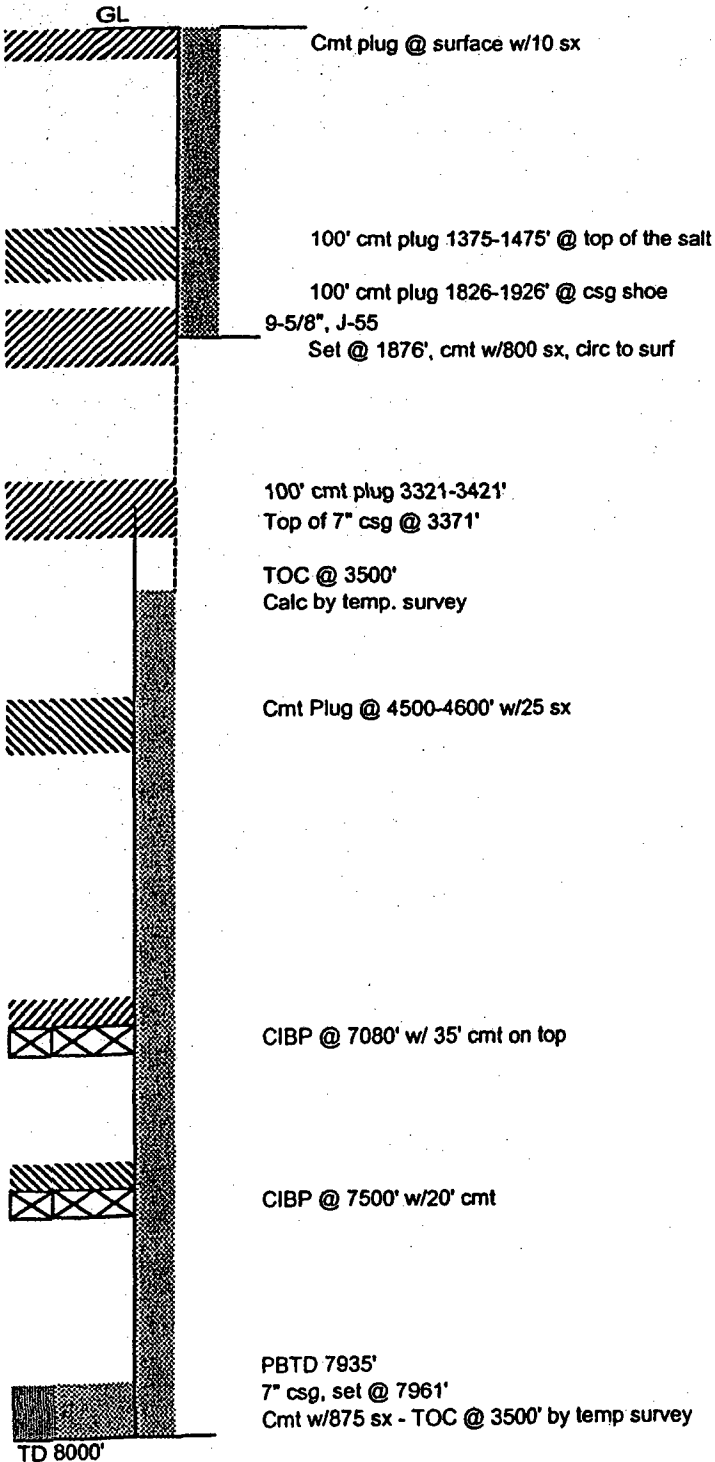
30-025-23420

GR Elev:

3,609 + KB of

ft =

3,609 ft KB Elevation



WELL HISTORY:

Spud 12/10/84
Rig Rise. P&A'd well - 6/28/1993

Plugging Information is from State Reports.

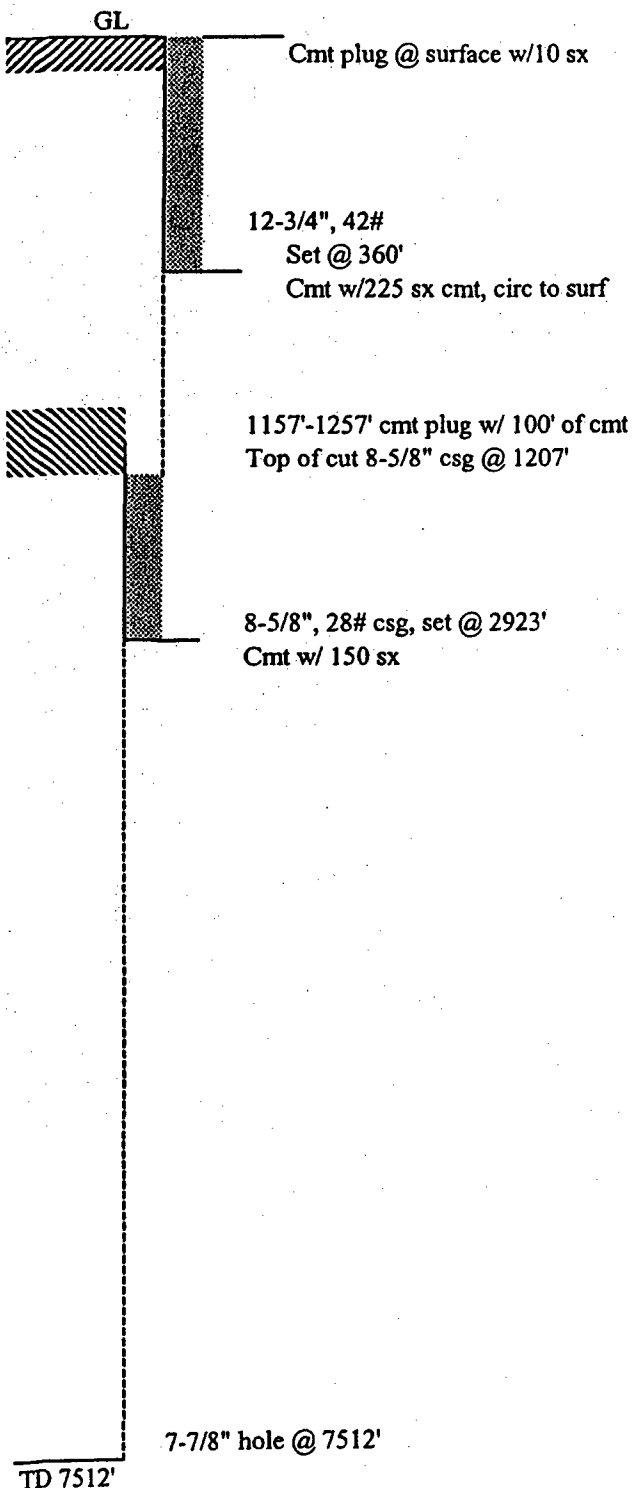
Check

WELLBORE SCHEMATIC

☐ Proposed

☒ Actual

Well Name & No.: VIERSEN #1 Operator: HANSON OIL CORP.
Location: 1980' FNL & 1980 FEL, UNIT "J", SEC. 30, T-18-S, R-39-E
County: Lea State: NM API #: 30-025-23420
GR. Elev: 3,606 + KB of ft = 3,606 ft KB Elevation



WELL HISTORY:

Spud 1/14/70
Rig Rlse. P&A'd well - 4/30/73

Plugging Information is from State Reports.

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103 1 5 1
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☐	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER- Dry Hole		7. Unit Agreement Name
2. Name of Operator Hanson Oil Company		8. Farm or Lease Name Viersen
3. Address of Operator P. O. Box 1515, Roswell, New Mexico 88201		9. Well No. 1
4. Location of Well UNIT LETTER <u>J</u> 1980 FEET FROM THE <u>South</u> LINE AND 1980 FEET FROM THE <u>East</u> LINE, SECTION <u>30</u> TOWNSHIP <u>18-S</u> RANGE <u>39-E</u> NMPM.		10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3617' KB		12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
CASING TEST AND CEMENT JOBS ☐	OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

3-9-70 Upon verbal approval of Mr. Joe Ramey of the NMOCC, Hobbs, the captioned well was plugged and abandoned in the following manner:

All plugs were set in heavy mud.

1. Set 25 sx. plug @ 7425-7512' (T.D. @ 7512')
2. Set 25 sx. plug @ 5791-5878' (Top of Glorietta @ 5834')
3. Set 25 sx. plug @ 4380-4467' (Top of San Andres @ 4423')
4. Set 25 sx. plug @ 2901-2965' (8-5/8" csg. set @ 2923')
5. Set 25 sx. plug @ 576-640' (8-5/8" csg. shot off @ 598')
6. Set 25 sx. plug @ 351-382' (12-3/4" csg. set @ 360')
7. Set 10 sx. plug @ 0-8' and erected a regulation dry hole marker.

The pits were then filled and the location cleaned up prior to inspection by the N.M.O.C.C.

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

SIGNED <u>Harry J. Schenck</u>	TITLE <u>Exec. Vice President</u>	DATE <u>3-13-70</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u>SUPERVISOR DISTRICT</u>	DATE <u>MAY 20 1970</u>
CONDITIONS OF APPROVAL, IF ANY:		

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☐	Fed ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. ☐ OIL WELL ☐ GAS WELL ☒ OTHER - Dry hole		7. Unit Agreement Name
2. Name of Operator Hanson Oil Company		8. Name of Lease Name Viersen
3. Address of Operator P. O. Box 1515, Roswell, New Mexico 88201		9. Well No. 1
4. Location of Well UNIT LETTER J , 1980 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE, SECTION 30 TOWNSHIP 18-S RANGE 39-E NMPM.		10. Field and Pool, or Wildcat Wildcat
15. Elevation (Show whether DF, RT, GR, etc.) 3617' KB		12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☒	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOB ☐	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

2-11-70 Verbal request was made this date, and approved by Mr. Joe Ramey of the NMOC, Hobbs, to plug and abandon the captioned well in the following manner:

Set a 25 sx. cement plug at T. D. 7512'.
Set a 25 sx. cement plug at the Top of the Glorietta Fm.
Set a 25 sx. cement plug at the Top of the San Andres Fm.
Set a 25 sx. cement plug in-and-out of the 8-5/8" casing at 2923'.
Set a 25 sx. cement plug in-and-out of the 8-5/8" casing where shot off and pulled.
Set a 25 sx. cement plug in-and-out of 12-3/4" casing at 352'.
Set a 10 sx. cement plug at the surface and erect a regulation dry hole marker.

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

SIGNED *Harry T. Schuman* TITLE Exec. Vice President DATE 2-11-70
APPROVED BY *[Signature]* TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

CORRECTION

Corrects form dated 3-26-73 wherein well was numbered 1-Y & footage incorrect

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER- <u>Dry Hole</u>	7. Unit Agreement Name
2. Name of Operator <u>Donald G. Stevens</u>	8. Farm or Lease Name <u>Viersen</u>
3. Address of Operator <u>P. O. Box 1797, Santa Fe, New Mexico 87501</u>	9. Well No. <u>1</u>
4. Location of Well UNIT LETTER <u>J</u> , <u>1980</u> FEET FROM THE <u>South</u> LINE AND <u>1980</u> FEET FROM THE <u>East</u> LINE, SECTION <u>30</u> TOWNSHIP <u>18S</u> RANGE <u>39E</u> NMPM.	10. Field and Pool, or Wildcat <u>Wildcat</u>
15. Elevation (Show whether DF, RT, GR, etc.) <u>3617 RKB</u>	12. County <u>Lea</u>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☒	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☒	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

12-20 Spudded well @ 8:00 a.m.

12-22 Set casing bowl over 8 5/8 stub at 1004' after milling 6' off stub.

12-28 T. D. 2798'. Fished out on bit left in hole @2680. Removed second bit w/junk shot @2681. Failed to remove third bit w/junk shot @2789'. Under verbal authority from Joe Ramey dialog shot off 8 5/8 casing @1251'. Waiting on Hobbs Pipe & Supply to recover casing from 1-Y Viersen at which time Hobbs Pipe & Supply will place plugs as follows:

100' @ stub of 8 5/8 @ 1251'.

100' @ base of 13 3/8" @ 360'.

10' @ surface

Regulation dry hole marker will be installed.

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

SIGNED Donald G. Stevens TITLE Owner DATE 3-31-73

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Check

WELLBORE SCHEMATIC

☐ Proposed

☒ Actual

Well Name & No.:

BROWNING #1

Operator: PHILLIPS PETROLEUM CO.

Location:

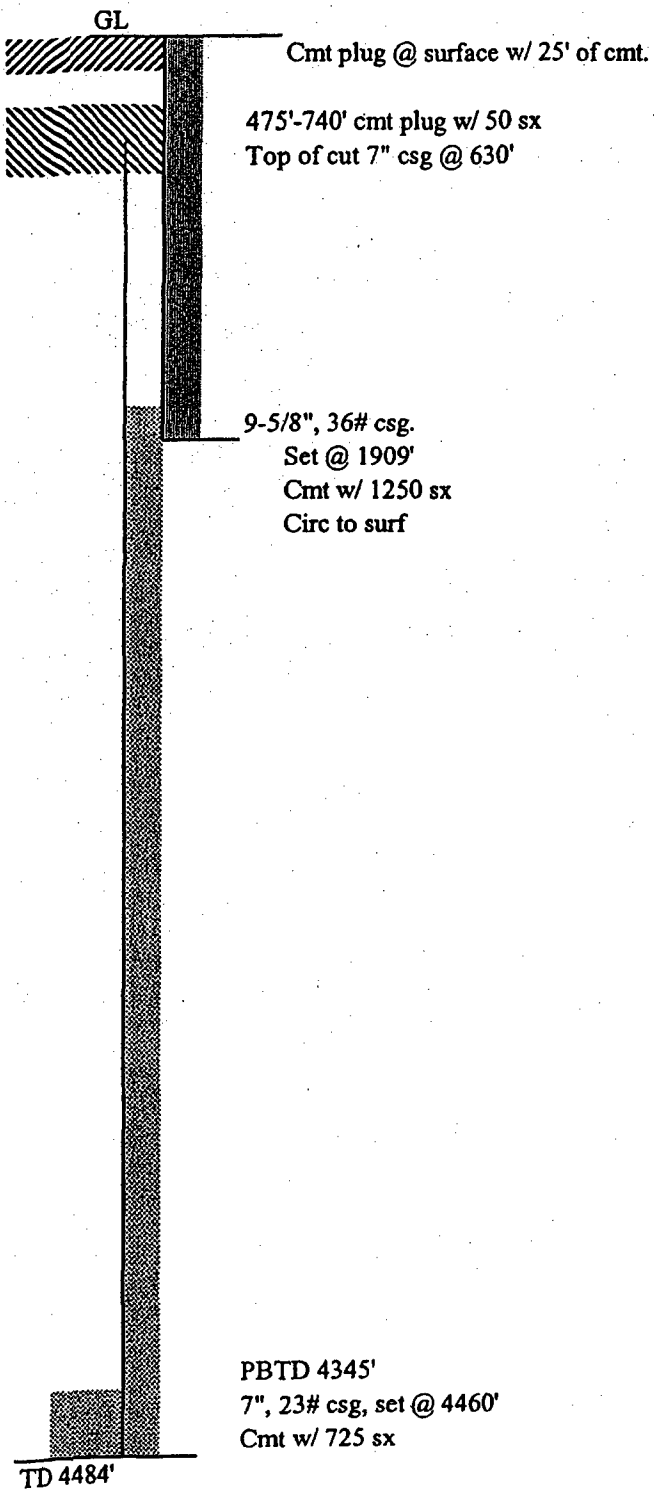
1980' FNL, 660' FWL, SEC. 29, T-18-S, R-39-E

County:

LEA State: NM API #: 30-025-07946

GR Elev:

3605' + KB of _____ ft = 0 ft KB Elevation



WELL HISTORY:

Spud 6/26/53
Rig Rlse. P&A'd well 9/13/53

Plugging Information is from State Reports.

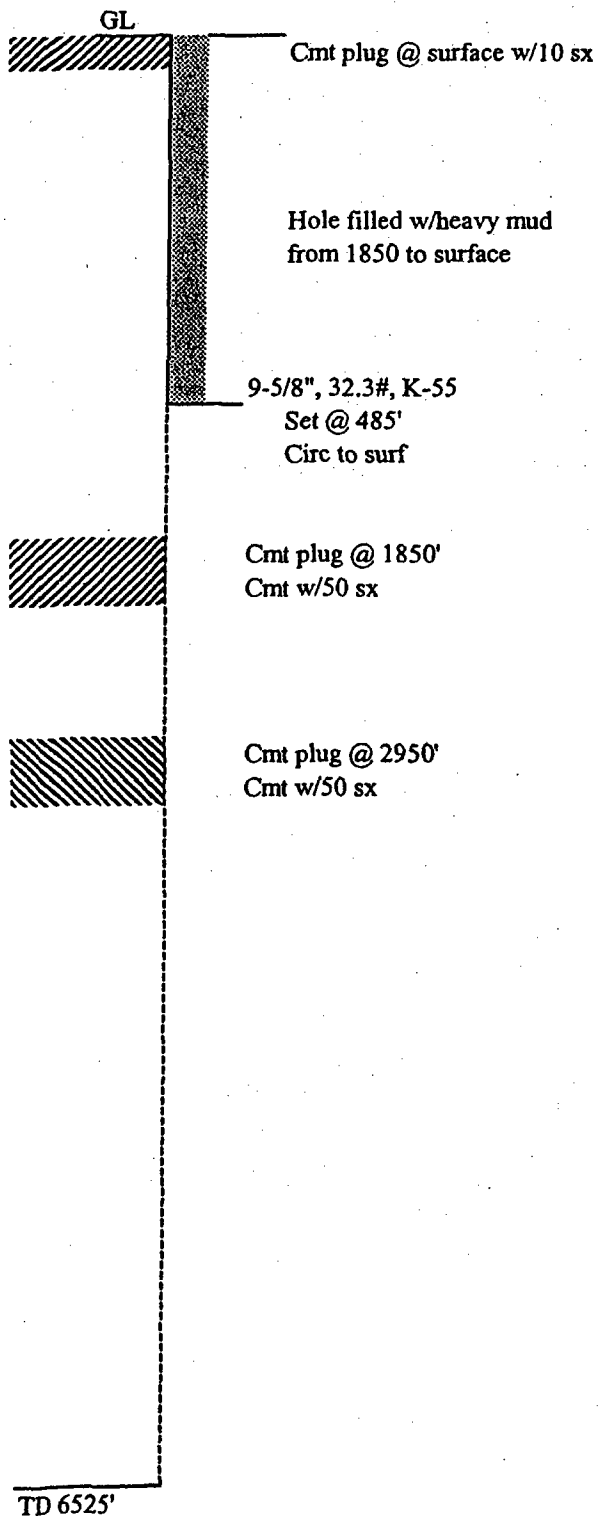
Check

WELLBORE SCHEMATIC

☐ Proposed

☒ Actual

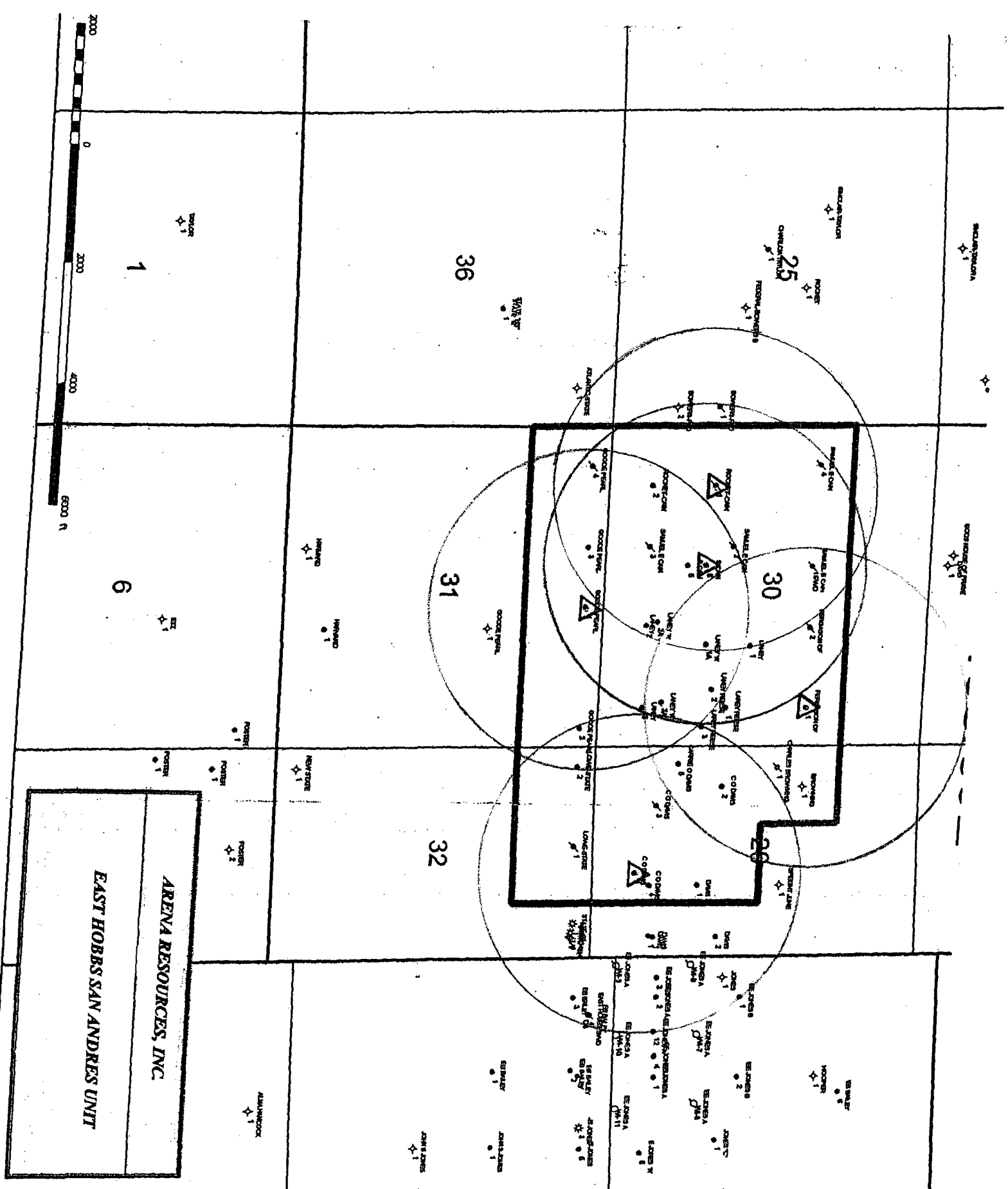
Well Name & No.: PEARL GOODE #1 Operator: STANOLIND OIL & GAS CO.
Location: 1980' FNL & 1980 FEL, SEC. 31, T-18-S, R-39-E
County: Lea State: NM API #: 30-025-07959
GR Elev: 3,602 + KB of ft = 3,602 ft KB Elevation



WELL HISTORY:

Spud 1/3/52
Rig Rlse. P&A'd well - 4/7/1952

Plugging Information is from State Reports.



Arena Resources, Inc.
East Hobbs (San Andres) Field
Application for Authorization to Inject
NMOCD Form C-108

VII. Proposed Injection Operations

- | | | | |
|----|--------------------------------|---|----------------------|
| 1) | Injection Rate Per Well: | Average
Maximum | 500 BWPD
750 BWPD |
| 2) | Injection System: | Closed | |
| 3) | Injection Pressure (wellhead): | Average
Maximum | 600 psig
890 psig |
| 4) | Injection Fluid: | Water from the San Andres formation within the proposed East Hobbs (San Andres) Unit. Water analyses are attached for 2 producing wells, CO Davis #2 and Ralph Lowe State #2. | |

VIII. Geologic Data

A. Injection Zone

- | | | |
|----|--------------|---|
| 1) | Name: | San Andres Formation |
| 2) | Description: | Injection will be into the San Andres formation within the field. The San Andres is a fine to coarsely crystalline dolostones, dolomitized grainstones, and dolomitic sandstones. The formation ranges in depth from 4440' to 4650'. The total net pay in the productive wells range from 119 to 164 feet. Average porosity is 16.2% and average permeability is 11.8 md. |

B. Fresh Water Sources

The State Engineer's Office reports fresh water production potential from the Ogallala formation. The bottom depth of ground water is reported to be 200 feet in Sect. 29, 95 feet in Sect. 30, 110 feet in Sec. 31, and 70 feet in Sect. 32 of T18S, R39E. There are 50 permitted water wells in the area of review and are listed on the attached table. There are no fresh water sources below the proposed injection interval.

Arena Resources, Inc.
East Hobbs (San Andres) Field
Application for Authorization to Inject
NMOCD Form C-108

IX. Proposed Stimulation Program

Phase I of the proposed waterflood will be to convert four Producing wells to injection wells. In two of the wells, Injection will be into the current producing zones with no Stimulation. In the other two wells, 4 ½" casing will be run After deepening the wells to 4650'. The San Andres P2-P3-P4 will be perforated and the wells placed on injection after acid jobs of 1000 gallons of 15% HCL acid.

X. Logging and Test Data

Two of the wells will be deepened. Once this work is completed, any logs obtained will be filed with the NMOCD.

XI. Fresh Water Analysis

Attached are the fresh water analyses from two of the active water wells in the area. The well labeled P Goode was permitted for irrigation by Coyotye Farms (L04053) in Section 31. The labeled CO Davis was permitted for domestic use by Lee Roberson (L11116) in Section 29.

XII. Disposal Well Statement

This section does not apply to this application since no d disposal wells are being proposed.

XIII. Proof of Notice

A copy of this application has been furnished to all surface owners and leasehold operators within the area of review.

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : HILLIN-SIMON

Date : 12-13-1988

Location: C. O. DAVIS #2 (on 12-06-1988)

Specific Gravity:	<u>Sample 1</u>
Total Dissolved Solids:	1.013
pH:	17970
IONIC STRENGTH:	6.65
	0.348

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	52.0	1040
Magnesium	(Mg ⁺²)	22.0	267
Sodium	(Na ⁺¹)	212	4870
Iron (total)	(Fe ⁺²)	3.69	103
Barium	(Ba ⁺²)	0.003	0.200

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	41.2	2510
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	47.4	2280
Chloride	(Cl ⁻¹)	197	7000

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
86°F	30°C	<u>Carbonate</u>	<u>Sulfate</u>
		0.68	-4.6

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : HILLIN-SIMON

Date : 12-13-1988

Location: RALPH LOWE #2 (on 12-06-1988)

Specific Gravity:

Total Dissolved Solids:

pH:

IONIC STRENGTH:

Sample 1

1.013

17814

7.28

0.337

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	36.0	720
Magnesium	(Mg ⁺²)	22.0	267
Sodium	(Na ⁺¹)	230	5290
Iron (total)	(Fe ⁺²)	0.315	8.80
Barium	(Ba ⁺²)	0.003	0.200
<u>ANIONS:</u>			
Bicarbonate	(HCO ₃ ⁻¹)	33.4	2040
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	37.5	1800
Chloride	(Cl ⁻¹)	217	7700

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
86°F	30°C	<u>Carbonate</u>	<u>Sulfate</u>
		1.1	-17

WATER WELL DATA REPORT AS OF FEBRUARY 12, 2002

	Use	Owner	Well Number	Twp	Rng	Sec	Qtr	Qtr	Qtr	Qtr	Start Date	Finish Date	Depth (ft.)	Well Water
1	DOM	MARTIN HUGHES	L 04096 APPRO EXP	18S	39E	29	NE							
2	DOM	WILLIAM TUCKER	L 04771 APPRO	18S	39E	29	NW	NE	NW		12/15/1961	12/16/1961	120	65
3	DOM	LEE ROBERSON	L 11116	18S	39E	29	NW	NE	NW		8/21/2000	8/21/2000	240	200
4	PRO	ANADARKO PROD CO.	L 08365	18S	39E	29	NW	SE			3/11/1981	3/12/1981	150	84
5	IRR	LEE ROBERSON	L 03430 S	18S	39E	29	NW	SW	NE					
6	PRO	KEATING DRILLING CO.	L 01217 APPRO	18S	39E	29	SE	SE	NE		9/9/1951	9/11/1951	120	
7	DOM	D. D. JONES	L 06512	18S	39E	30	NE	NE			9/12/1969	9/14/1969	170	70
8	DOM	TERRY CAWLEY	L 09289	18S	39E	30	NE	NE	NW		8/5/1983	8/5/1983	150	60
9	DOM	LEROY N. BOX	L 09912	18S	39E	30	NE	NE			4/27/1987	4/27/1987	155	95
10	DOM	ADAN RODRIGUEZ	L 09948	18S	39E	30	NE	NE			9/3/1987	9/3/1987	150	88
11	DOM	TURNER J C JR	L 10389	18S	39E	30	NE	NE	NW		5/13/1994	5/14/1994	180	87
12	DOM	ROB L. HOLDRIDGE	L 05183 EXP	18S	39E	30	NE	NW	NE					
13	DOM	CARLTON C. WADE	L 05187 EXP	18S	39E	30	NE	NW						
14	DOM	CARLTON C. MR. WADE	L 05448 EXP	18S	39E	30	NE	NW						
15	DOM	ROB L. HOLDRIDGE	L 10538	18S	39E	30	NE	NW	NW		2/5/1996	2/16/1996	200	
16	PRO	THE TEXAS COMPANY	L 02173 APPRO	18S	39E	30	NE	SE						
17	DOM	JIMMY D. ROBERTS	L 08039	18S	39E	30	NE	SE			3/21/1979	3/28/1979	150	50
18	DOM	JERRY D. SMITH	L 08040	18S	39E	30	NE	SE			5/14/1979	5/18/1979	150	85
19	DOM	ROB L. HOLDRIDGE	L 07231 CLW	18S	39E	30	NE	SW	NE		8/25/2001	8/25/2001	195	
20	DOM	THOMAS G. PIERCE	L 08294	18S	39E	30	NE	SW	NE		7/1/1980	7/3/1980	150	90
21	DOM	MICHAEL W. HOLDRIDGE	L 08550	18S	39E	30	NE	SW			10/29/1981	10/31/1981	150	82
22	DOM	GARNICE LAND	L 05197	18S	39E	30	NE				8/26/1963	8/28/1963	100	70
23	DOM	JACK ROBERTS	L 05924	18S	39E	30	NE				11/26/1989	11/26/1989	150	85
24	DOM	ADAN B. RODRIGUEZ	L 07492	18S	39E	30	NE				1/23/1980	1/24/1980	150	82
25	PRO	HUMBLE OIL & REFINING CO.	L 02204 APPRO	18S	39E	30	NW	SE	NW		5/3/1953	5/4/1953	123	65
26	EXP	RICE ENGINEERING COMPANY	L 07671 EXPL 1 & 2	18S	39E	30	NW	SE	NE		3/30/1977	3/31/1977	150	
27	PRO	CACTUS DRILLING COMPANY	L 06633 (E)	18S	39E	30	SE	NW	SW					
28	DOM	DARRELL G. BINGHAM	L 04054 REPAR	18S	39E	31	NE	NW	NW		9/9/1980	9/12/1980	148	105
29	PRO	DAVIDSON DRILLING CO.	L 01333	18S	39E	31	NE	SW			1/1/1952	1/2/1952	123	55
30	DOM	OLLIE T. FORE	L 02439 APPRO	18S	39E	31	NW	NE	SW		1/1/1953	1/3/1953	135	60
31	DOM	L. W. GASSAWAY	L 06605 EXP	18S	39E	31	NW	NW	NW					
32	DOM	TERRY L. OWEN	L 10006	18S	39E	31	NW				7/6/1988	7/18/1988	120	79
33	IRR	COYOTTE FARMS, LLC	L 04053	18S	39E	31	SE	SW	NE				160	
34	DOM	JOHN KING	L 08982	18S	39E	31	SW	NE	SE					
35	DOM	GUILLERMO VILLALOBOS	L 09160	18S	39E	31	SW	NE	NE		4/17/1983	4/18/1983	151	73
36	DOM	ROBERT CUNNINGHAM	L 08698	18S	39E	31	SW	SE			3/12/1982	3/18/1982	150	100
37	PRO	INC. PRIMARY FUELS	L 09999	18S	39E	31	SW	SE			5/6/1988	5/10/1988	164	110
38	DOM	GEORGE A. MANN	L 06891 EXP	18S	39E	31	SW	SW	SE					
39	DOM	RAUL C. GONZALEZ	L 08565	18S	39E	31	SW	SW	NE		10/27/1981	10/30/1981	140	95
40	DOM	MARGARITA ROBLES	L 10973	18S	39E	31	SW	SW	NW		8/13/1999	8/13/1999	158	103
41	DOM	EARL MANNING	L 06713 EXP	18S	39E	31	SW							
42	DOM	BETTY FOLLIS	L 06714 EXP	18S	39E	31	SW							
43	DOM	JACK SICKLER	L 08862 EXP 1 & 2	18S	39E	31	SW							
44	DOM	PAULINO G. QUIROZ	L 09453 EXP	18S	39E	31	SW							
45	DOM	RAMIREZ ARTURO	L 10331	18S	39E	31	SW							
46	DOM	PAULINO G. QUIROZ	L 10692	18S	39E	31	SW							
47	PRO	SHARPE DRILLING CO.	L 01325 APPRO	18S	39E	32	NE	NE	NE		12/18/1952	12/19/1952	115	40
48	PRO	STONE DRILLING CO.	L 02302 APPRO	18S	39E	32	NW	NW	NE				86	30
49	STK	GARY M. SCHUBERT	L 10144	18S	39E	32	SW	NE			9/5/1990	9/5/1990	150	70
50	DOM	SCHUBERT GARY	L 10298	18S	39E	32	SW	SW	SW		11/20/1992	11/20/1992	180	68

Above Information Obtained from: NM State Engineer's Office - Water Administration Technical Engineering Resource System



ARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENERQUEST RESOURCES L.L.C.
ATTN: CHRIS RENAUD
P.O. BOX 11150
MIDLAND, TX 79702
FAX TO: (915) 687-4804

Receiving Date: 02/21/02
Reporting Date: 02/22/02
Project Number: NOT GIVEN
Project Name: FRESH WATER SAMPLES
Project Location: PEARL GOODE & C.O. DAVIS

Sampling Date: 02/21/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity (mgCaCO ₃ /L)
------------	-----------	--------------	--------------	--------------	-------------	-------------------------	--

ANALYSIS DATE:	02/22/02	02/21/02	02/21/02	02/21/02	02/21/02	02/21/02	02/21/02
H6533-1 P. GOODE	50	83	22	2.82	1022	155	
H6533-2 C.O. DAVIS	111	194	62	6.29	2395	200	
Quality Control	NR	55	49	5.27	1489	NR	
True Value QC	NR	50	50	5.00	1413	NR	
% Accuracy	NR	110	97.2	105	105	NR	
Relative Percent Difference	NR	0	6.0	0	0.3	NR	

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
----------	-------------	-----------	------	-------	-------

Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
---------------------------	---------------------------	---------------------------	----------------------------	--------------	---------------

ANALYSIS DATE:	02/21/02	02/21/02	02/21/02	02/21/02	02/21/02	02/22/02
H6533-1 P. GOODE	124	77	0	190	7.24	465
H6533-2 C.O. DAVIS	384	239	0	244	7.35	1472
Quality Control	1020	52.66	NR	948	7.11	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Accuracy	102	105	NR	94.8	102	NR
Relative Percent Difference	5.0	0.6	NR	0.4	1.6	5.1

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
----------	-------------	-------	-------	-------	-------	-------

Amy Hill
Chemist

2-22-02
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H6533

24

EAST HOBBS SAN ANDRES UNIT

Land Owners

Jeff & Tena Raines
PO Box 2946
Hobbs, NM 88241

Jimmy & Joyce Roberts
PO Box 1857
Hobbs, NM 88241

Iola Henry (Samuel Kane)
3100 E. Lora Lane
Hobbs, NM 88240

Garnice Land
4707 E. Bronc Road
Hobbs, NM 88240

Guy Williams
PO Box 789
Hobbs, NM 88241

Larry Haston
4211 E. Sanger
Hobbs, NM 88240

W.L. Gassaway
714 Blue Quail Lane
Hobbs, NM 88240

David H. Arrington
Oil & Gas Inc.
PO Box 2071
Midland, TX 79702

offset operator

EAST HOBBS SAN ANDRES UNIT

Land Owners

Texland Petroleum, Inc.
777 Main Street
Suite 3200
Fort Worth, TX 76102

offset operator

Velma Gilmer Trust
Mr. Gary Ray Gilmer
1855 Milstream Drive
Fredrick, MD 21702

State of New Mexico
Commissioner of Public Lands
310 Old Santa Fe Trail
PO Box 1148
Santa Fe, NM 87504-1148



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

W. L. Gassaway
714 Blue Quail Lane
Hobbs, NM 88240

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry", written over a large, stylized circular flourish.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece or on the front if space permits.

1. Article Addressed to:

W. L. Grassaway
714 Blue Quail Lane
Hobbs, NM 88240

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Handwritten Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

[Handwritten Name]

C. Date of Delivery

[Handwritten Date: 11/26/04]

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label)

70031 11680 11000 61 51178 1 2136

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Velma Gilmer Trust
Mr. Gary Ray Gilmer
1855 Milstream Drive
Fredrick, MD 21702

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping tail.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece or on the front if space permits.

1. Article Addressed to:

Velma Gilmer Trust
Mr. Gary Ray Gilmer
1855 midstream Drive
Frederick, MD 21702

2. Article Number

(Transfer from service label)

7003 1680 0006 5178 2129

PS Form 3801, August 2001

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Handwritten Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Linon B. Gilmer

C. Date of Delivery

11/26/01

D. Is delivery address different from item 1?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Larry Haston
4211 E. Sanger
Hobbs, NM 88240

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry", written over a large, stylized circular flourish.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Larry Haston
4211 E. Sanger
Hobbs, NM 88240

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Linda Haston* ☐ Agent ☒ Addressee

B. Received by (Printed Name)

C. Date of Delivery

11/26/09

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

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number

(Transfer from service label)

7003 1680 0006 5178 2112

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Iola Henry
3100 E. Lora Ln.
Hobbs, NM 88240

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large initial "P" and "T".

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Iola Henry
3100 E. Lora Lane
Hobbs, N.M. 88240

2. Article Number

(Transfer from service label)

7003 11689 0006 15178 21051

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Iola Henry*

☐ Agent

☒ Addressee

B. Received by (Printed Name)

☐ Date of Delivery

D. Is delivery address different from item 1?

If YES, enter delivery address below:

☐ Yes

☒ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes





4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Garnice Land
4707 E. Bronc Road
Hobbs, NM 88240

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large initial "P" and "T".

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Garnice Land
4707 E. Brone Road
Hobbs, NM 88240

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Garnice Land*

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Date of Delivery

D. Is delivery address different from item A?

If YES, enter delivery address below

☒ Yes

☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label)

PS Form 3811, August 2001 |||| 71003 1680 10006 15 1718 1 20824 ||||

Domestic Return Receipt

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Jeff & Tena Raines
PO Box 2946
Hobbs, NM 88241

Re: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry", written in a cursive style.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jeff and Tena Rames
P.O. Box 2946
Hobbs, NM 88241

2. Article Number

(Transfer from service label)

PS Form 3811, August 2001

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x *James Roberts*

☐ Agent

☐ Addressee

B. Received by (Printed Name)

James Roberts

C. Date of Delivery

12-2-04

D. Is delivery address different from item 1?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

Domestic Return Receipt

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Jimmy & Joyce Roberts
PO Box 1857
Hobbs, NM 88241

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large initial "P" and "T".

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece or on the front if space permits.

1. Article Addressed to:

Jimmy and Joyce Roberts
P.O. Box 1857
Hobbs, NM 88241

2. Article Number

(Transfer from service label)

7063 11480 0066 15178 112273

PS Form 3811, August 2001

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x *Joyce Roberts*

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Joyce Roberts

C. Date of Delivery

11/29/04

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Guy Williams
PO Box 789
Hobbs, NM 88241

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is written in a cursive, flowing style.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Guy Williams
P.O. Box 789
Hobbs, NM 88241

2. Article Number:

(Transfer from service label)

7003 1680 0006 5178 2242

PS Form 3811, August 2001

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Guy Williams

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

102505-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

State of New Mexico
Commissioner of Public Lands
310 Old Santa Fe Trail
PO Box 1148
Santa Fe, NM 87504-1148

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Landowner:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large initial "P" and "T".

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

State of New Mexico
Commissioner of Public Lands
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, nm 87504-1148

2. Article Number

(Transfer from service label)

7003 0630 0006 5178 2264

PS Form 3811, August 2001

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent

☐ Addressee

B. Recipient's Printed Name

C. Date of Delivery

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

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



102595-02-44-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

David H. Arrington Oil & Gas Inc.
PO Box 2071
Midland, TX 79702

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Gentlemen:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip W. Terry". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping tail that extends to the right.

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

David H. Arrington
Oil & Gas Inc.
P.O. Box 2071
Midland, TX 79702

2. Article Number

(Transfer from service label)

PS Form 3811, August 2001

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Sarah K. Hayes*☐ Agent☐ Addressee

B. Received by (Printed Name)

Sarah K. Hayes

C. Date of Delivery

*11-29-04*D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below:

☐ No

3. Service type

☒ Certified Mail☐ Express Mail☐ Registered☐ Return Receipt for Merchandise☐ Insured Mail☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

Domestic Return Receipt

102595-02-M-1540



4920 S. Lewis, Suite 107 Tulsa, Oklahoma 74105
Phone (918) 747-6060 FAX (918) 747-7620

November 22, 2004

Texland Petroleum, Inc.
777 Main Street
Suite 3200
Fort Worth, TX 76102

RE: East Hobbs San Andres Unit
Lea County, New Mexico

Dear Gentlemen:

Attached is a copy of the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Form C-108 Application for Authorization to Inject for the East Hobbs San Andres Unit Waterflood. This is an expansion of the waterflood project approved November 14, 2003 by Order No. R-11980-A.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Phillip W. Terry".

Phillip W. Terry
Petroleum Engineer

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Texaco Petroleum, Inc
777 Main Street
Suite 3000
Fort Worth, TX 76102

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Handwritten Signature]

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

NOV 24 2004

D. Is delivery address different from item 1?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

☒ Certified Mail

☐ Express Mail

☐ Registered

☐ Return Receipt for Merchandise

☐ Insured Mail

☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label)

7003 11680 0004 5178 2099

IRS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

LEGAL NOTICE
November 26, 2004

(1) Applicant:
Arena Resources, Inc.
4920 S. Lewis
Suite 107
Tulsa, OK 74106
918-747-8080
Contact: Phillip W. Terry

(2) Intended purpose of the injection well and exact well locations. The wells will be equipped as produced water injection wells for the purpose of enhanced oil recovery.

The wells and their legal locations are:

East Hobbs San Andres Unit #021
Unit Letter H
1983' From North Line - 661' From East Line
Sec. 30-18S-39E
Lea Co., NM

East Hobbs San Andres Unit #011
Unit Letter N
660' From South Line - 2103' From West Line
Sec. 29-18S-39E
Lea Co., NM

East Hobbs San Andres Unit #128
Unit Letter K
1650' From South Line - 2310' From West Line
Sec. 30-18S-39E
Lea Co., NM

East Hobbs San Andres Unit #111
Unit Letter L
1650' From South Line - 990' From West Line
Sec. 30-18S-39E
Lea Co., NM

East Hobbs San Andres Unit #091
Unit Letter B
330' From North Line - 2310' From East Line
Sec. 31 - 18S-39E
Lea Co., NM

(3) Formation Name and Depth with expected maximum injection rates and pressures.

Formation:	San Andres
Depth:	4441-4687
Maximum Injection Rate:	750 barrels per day per well
Maximum Injection Pressure:	890 psig

(4) A Notice stating that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505 within 15 days.

#21140