

JAMES BRUCE
ATTORNEY AT LAW

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2012 FEB 15 P 12:59

February 14, 2012

Case 14803

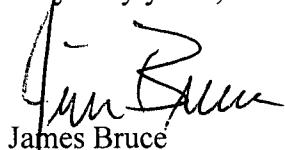
Hand Delivered

Florene Davidson
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Florene:

Enclosed for filing, on behalf of Apache Corporation, is an application to amend an order for a secondary recovery project, together with a proposed advertisement. The advertisements have also been e-mailed to the Division. Please set this matter for the March 15, 2012 Examiner hearing. The parties being notified are listed on Exhibit A. Thank you.

Very truly yours,



James Bruce

Attorney for Apache Corporation

**List of Working Interest Owners within ½-mile radius of
Blankenship Well No. 2, as to the Paddock Formation**

TOWNSHIP 20 SOUTH, RANGE 38 EAST, N.M.P.M.

SW/4NE/4 Section 11:

Apache Corporation

NW/4SE/4 Section 11:

Apache Corporation

SW/4SE/4 Section 11:

Apache Corporation

E/2E/2 Section 11:

Apache Corporation

NW/4NW/4 Section 12:

Western Commerce Bank, Agent
for the Kirby Schenck Trust
P. O. Box 1627
Lovington, NM 88260

Alton C. White, Jr.
3112 Above Stratford Place
Austin, TX 78746

Petro Tiger I, Ltd.
P. O. Box 3166
Tulsa, OK 74101

Mark L. Shidler and wife
Mitzi Shidler
1010 Lamar #500
Houston, TX 77002

Intrepid Energy L.L.C.
P. O. Box 711
Yankton, SD 57078

EXHIBIT

A

Zeus Petroleum, Inc.
P. O. Box 458
Bellaire, TX 77402-0458

John E. Donnellan and wife
Gail Donnellan
P. O. Box 1433
Chickasha, OK 73023

Trio Production Company, L.L.C.
1601 E. 19th St.
Edmond, OK 73013

Cynthia Stratton O'Malley
9575 Katy Freeway, Suite 440
Houston, TX 77024-1408

Partin Petroleum, Inc.
P. O. Box 572425
Houston, TX 77257-2425

Suzanne Thomas
3936 Byron St.
Houston, TX 77005

Ward N. Adkins, Jr.
5519 Tupper Lake
Houston, TX 77056

NE/4NW/4 Section 12:

Devon Energy Production Company, L.P.
Suite 1500
20 North Broadway,
Oklahoma City, OK 73102-8260

NM O&G Ltd.
P. O. Box 10217
Lubbock, TX 79408

Nona Pevehouse Burgamy
7112 19th St.
Lubbock, TX 79407-4402

Lucille Pevehouse, Executrix of the
Estate of Byron Cone Pevehouse
13623 NE 32nd Place
Bellevue, WA 98005

Marjorie Cone Kastman
P. O. Box 5930
Lubbock, TX 79408-5930

Stephen E. Cone, Jr.
P. O. Box 10321
Lubbock, TX 79408

Katherine Cone Keck
Suite 446
1801 Avenue of the Stars
Los Angeles, CA 90067-5906

SW/4NW/4 and W/2SW/4 Section 12:

Apache Corporation

SE/4NW/4 and NW/4SE/4 Section 12:

David M. Rost
P.O. Box 615
Ligonier, PA 15658

Katherine A. Keck

Marjorie Alice Kastman

NM O&G, Ltd.

Nona Pevehouse Burgamy

Lucille Pevehouse, Executrix of the
Estate of Byron Cone Pevehouse

SW/4NE/4 Section 12:

Olsen Energy Inc.
Suite 102
3512 Paesanos Parkway
San Antonio, TX 78231

Devon Energy Production Company, L.P.

NM O&G Ltd.

Nona Pevehouse Burgamy

Lucille Pevehouse, Executrix of the
Estate of Byron Cone Pevehouse

Marjorie Cone Kastman

Stephen E. Cone, Jr.

Katherine Cone Keck

E/2SW/4 and SW/4SE/4 Section 12:

Cobrador LLC
P.O. Box 10549
Midland, TX 79702

Critterville, LLC
P.O. Box 620
Wimberly, TX 78676

Dan M. Leonard
P.O. Box 3422
Midland, TX 79702-3422

Devon Energy Production Co., L.P.
P.O. Box 843559
Dallas, TX 75284-3559

El Captain Ventures, LLC
P.O. Box 700633
San Antonio, TX 78270

Eureka Gas Company Inc.
P.O. Box 2120
Allen, TX 75013

Frank Henry Revocable Living Trust
c/o The Bessemer Trust Co NA
Angelo Campanile, Sr. Vice President
630 Fifth Ave.
New York, NY 10111

JTD Resources LLC
P.O. Box 3422
Midland, TX 79702

L.S. Melzer
P.O. Box 2083
Midland, TX 79702-2083

Lisa L. Durban
P.O. Box 3194
Boulder, CO 80307

Mary A. Hudson Seay
P.O. Box 4462
Midland, TX 79704

Matthew Seay
10406 MacAndrew Lane
Chesterfield, VA 23838

Maurice Mordka Estate
Gail Mordka, Personal Representative
1800 North Grady Ave.
Tucson, AZ 85715

Melzer Exploration
P.O. Box 2083
Midland, TX 79702-2083

Michael Kyle Leonard Child's Trust
Michael Kyle Leonard, Trustee
P.O. Box 2625
Eagle Pass, TX 78853

Morgan Trust
67 East Baffert Dr.
Nogales, AZ 85621

PJC Limited Partnership
P.O. Box 1713
Roswell, NM 88202

Robert K. Leonard
P.O. Box 332
Midland, TX 79702

Roy G. Barton, Jr.
1919 North Turner St.
Hobbs, NM 88241-2712

S P Johnson III
S P Johnson III and Barbara
Jo Johnson, Trustees
P.O. Box 1641
Roswell, NM 88202-1641

Sandfly Inc.
P.O. Box 11371
Midland, TX 79704

Shannon C. Leonard Child's Trust
Shannon C. Leonard, Trustee
1018 Sunset Canyon Drive North
Dripping Springs, TX 78620

Melzer Exploration

Ted Weiner Oil Properties Trust
Gwendolyn P. Weiner, Individually
and as Trustee
P.O. Box 121938
Fort Worth, TX 76121

Texas Crude Operator Inc.
Charles Weiner, Patricia Ann Weiner,
Glen A. Bodzy, Gerald W. Bodzy,
Diane Weiner Dillard and Mary Don Weiner
P.O. Box 122389
Fort Worth, TX 76121-2389

Timothy A. Dernbach
No. 502E
2900 12th Avenue North
Billings, MT 59101

Tumbleweed Exploration LLC
P.O. Box 50688
Midland, TX 79710

Wadi Petroleum Inc.
Suite 200
4355 Sylvanfield
Houston, TX 77014

WBR Petroleum LLC
c/o WB Robbins, III, General Partner
P.O. Box 10428
Midland, TX 79702

Worrall Investment Corp.
P.O. Box 1834
Roswell, NM 88202-1834

NW/4NW/4 Section 13:

Apache Corporation

NE/4NW/4 Section 13:

Roy G. Barton Jr.

Texas Crude Operator Inc.
Charles Weiner, Patricia Ann Weiner,
Glen A. Bodzy, Gerald W. Bodzy,
Diane Weiner Dillard and Mary Don Weiner

Ted Weiner Oil Properties Trust
Gwendolyn P. Weiner, Individually
and as Trustee

NE/4NE/4 Section 14:

Apache Corporation

SURFACE OWNER (NW/4SW/4 Section 12):

Armando Valdez
228 Starlight Road
Hobbs, NM 88240

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED OOD

APPLICATION OF APACHE CORPORATION
TO AMEND ORDER NO. R-13176 FOR A
SECONDARY RECOVERY PROJECT, LEA
COUNTY, NEW MEXICO.

12 FEB 15 P 1:00

Case No. 14803

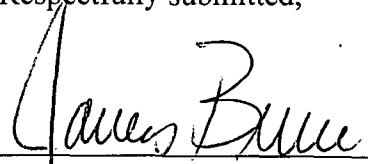
APPLICATION

Apache Corporation applies to amend an order approving a pilot secondary recovery project, and in support thereof, states:

1. Applicant is a working interest owner in and the operator of the Blankenship Lease, covering the W $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 12, Township 20 South, Range 38 East, N.M.P.M., containing 80.00 acres of fee lands.
2. Applicant previously obtained Division Order No. R-13176, approving a pilot secondary recovery project in the Blankenship Lease.
3. Order No. R-13176 approved injection of water into the Blinebry, Tubb, and Drinkard formations in the Blankenship Well No. 2, located 2075 feet from the south line and 555 feet from the west line of Section 12, Township 20 South, Range 38 East, NMPM, at depths of 6046-7028 feet subsurface.
4. Applicant seeks to amend Order No. R-13176 to also approve injection of water into the Paddock formation at depths of 5946-6045 feet subsurface.
5. Approval of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving the amended injection application.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James Bruce", is written over a horizontal line.

James Bruce
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorney for Apache Corporation

APPLICATION FOR AUTHORIZATION TO INJECT

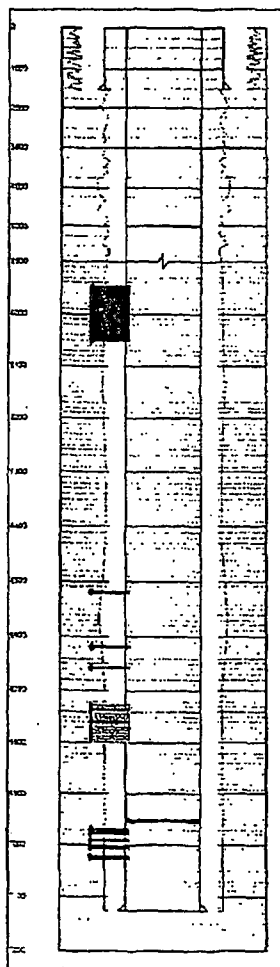
- I. PURPOSE: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ Yes ☐ No
- II. OPERATOR: Apache Corporation
ADDRESS: 303 Veterans Airpark Lane Ste. 3000; Midland, TX
CONTACT PARTY: Gary Timmerman 432-818-1026 or Michelle Hansen PHONE: 432-818-1000 ⁷⁹⁷⁰⁵
- 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. Just adding Paddock perms 5946-6055'
Current interval 6046-7028'
- IV. Is this an expansion of an existing project? ☒ Yes ☐ No
If yes, give the Division order number authorizing the project: R13176 Case 14360
- 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: Beverly Hatfield TITLE: Sr. Staff Regulatory Tech
SIGNATURE: Beverly Hatfield DATE: 2-9-12
E-MAIL ADDRESS: beverly.hatfield
- ☒ * 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: 7-10-2009 initial injection application

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Apache Corporation (873)

WELL NAME & NUMBER: Blankenship #2

WELL LOCATION: 2075' FSL & 555' FWL
FOOTAGE LOCATIONL
UNIT LETTER12
SECTION20S
TOWNSHIP38E
RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 12-1/4" Casing Size: 8-5/8" @ 1527'

Cemented with: 698 sx. or ft³

Top of Cement: surface Method Determined: circulate

Intermediate Casing

Hole Size: Casing Size:

Cemented with: sx. or ft³

Top of Cement: Method Determined:

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2" @ 7125'

Cemented with: 625 sx. or ft³

Top of Cement: 3160' Method Determined: Temp Survey

Total Depth: 7125'

Injection Interval

5900' feet to 7100' (perforated)

(Perforated or Open Hole; indicate which)

↓
Proposed
Paddock 5946-6055

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: none

Type of Packer: 5-1/2" Baker Lok-Seal

Packer Setting Depth: 5900'

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

Additional Data

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

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

2. Name of the Injection Formation: Blinebry / Tubb / Drinkard / Paddock

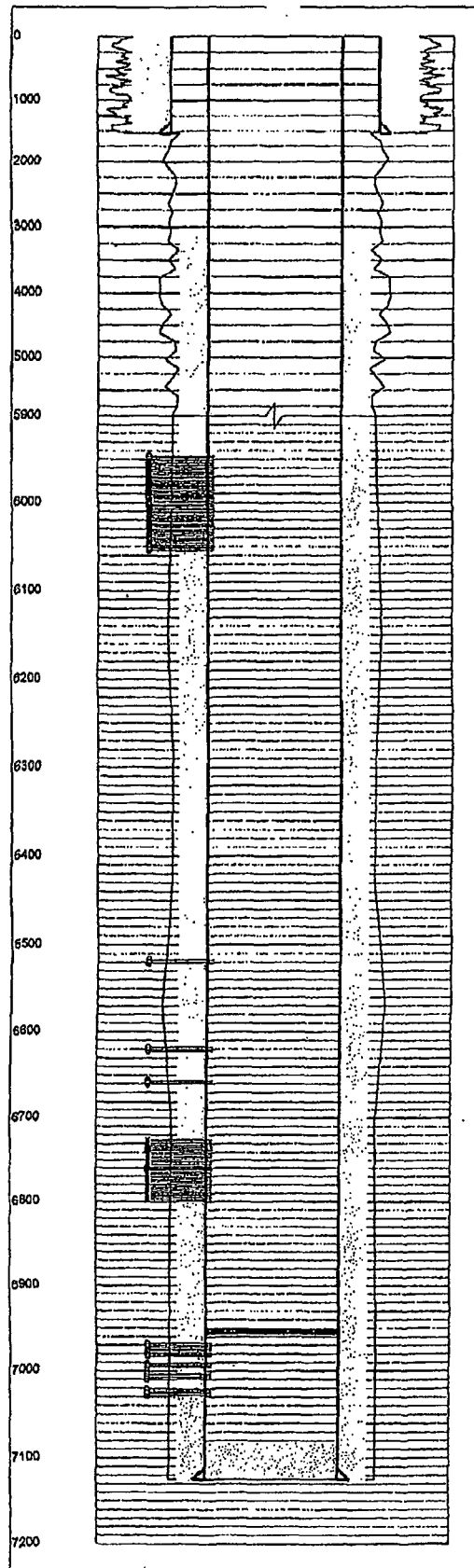
3. Name of Field or Pool (if applicable): House; Blinbry, South / House; Tubb / House; Drinkard / House Paddock

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. No

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

The next higher zone is the San Andres @ +/- 4264'

The next lower zone is the Abo @ +/- 7120'



CURRENT COMPLETION

Last Updated:

5/6/2009 5:06:28 PM

Field Name	Lease Name	Well No.
Houma	Blankenship	2
County	State	API
Lea	New Mexico	30-028-07767
	GL (ft)	KB (ft)
	3557	3889
Sec.	Twp/Blk	Rng/Svy
L-12	20S	38E
		Footage
		2075' FSL & 555' FWM from Section
Spud Date	Comp. Date	Prepared By
9/1/1957	10/18/1957	JLF
		Last Updated
		5/6/2009
Current Status		
Currently producing from Blinbery and Tubb perforations.		

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	12.0000	0	1,527	
9/1/1957	7.8750	1,527	7,125	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Top (KB ft)	Bottom (KB ft)
9/1/1957	Surface Casing	8.8250	32.00		0	1,527
9/1/1957	Production Casing	6.5000			0	7,125

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
9/1/1957	698	12.0000	8.8250	0	1,527
9/1/1957	625	7.8750	6.5000	3,150	7,125

Tools/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
4/18/2007	CIBP	5.5000	0.0000	6,950	

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)
9/1/1957	0	5.5000	7,084	7,125

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing
10/18/1957	Open	Drinkard	6,958	6,962			0
10/18/1957	Open	Drinkard	6,991	6,995			0
10/18/1957	Open	Drinkard	7,003	7,009			0
6/23/1962	Open	Drinkard	7,021	7,025			0
6/23/1962	Open	Drinkard	7,026	7,028			0
9/5/1979	Squeezed	Tubb	6,725	6,800			0
3/10/2005	Open	Blinbery	6,948	6,955	4	440	0
4/18/2007	Open	Tubb	6,517	6,521	2	10	120
4/18/2007	Open	Tubb	6,618	6,622	2	10	120
4/18/2007	Open	Tubb	6,658	6,660	2	10	120
4/18/2007	Open	Tubb	6,733	6,737	2	10	120
4/18/2007	Open	Tubb	6,758	6,762	2	10	120

Completion History Summary

Date	Comments
9/1/1957	Spud well
10/18/1957	Complete well in Drinkard (D1) perforations.
6/23/1962	Complete well in Drinkard (D2) perforations. Produced these perforations under a packer, isolating the D1 perforations.
9/5/1979	Set CIBP at 6870' and perforate Tubb (T1) from 6725-6800' with 10 holes.
1/6/1981	Drill out CIBP at 6870' and clean out to 7040'
3/15/2005	Set RBP at 6635' and cap w/ 2 sx sand. Perforate Blinbery (B1) perforations and produce from B1 perforations.
4/16/2007	Pull RBP at 6635' and run CNL and CIL from 6500-6950'. Set CIBP at 6950' and cap w/ 2 sx cement. Perforate Tubb (T2) perfs from 6517-6762' with 45 holes.

Last Updated:

5/6/2009 5:06:28 PM CURRENT COMPLETION

Field Name	Lease Name	Well No.	County	State	API	GL (ft)	KB (ft)
Houma	Blankenship	2	Lea	New Mexico	30-025-07767	3557	3569
Sec.	Twp/Blk	Rng/Svy	Footage	Spud Date	Comp. Date	Prepared By	Last Updated
L-12	208	30E	2075 FSL & 655' FWL from Section	9/1/1957	10/18/1957	JLF	5/6/2009
Current Status							
Currently producing from Blinabry and Tubb perforations.							

Detailed Summaries

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	12.0000	0	1,527	
9/1/1957	7.8750	1,527	7,125	

Tubular Summary

Date	Description	OD (in)	WM (lb/ft)	Grade	Coupling	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	Surface Casing	8.6250	32.00			0	1,527	
9/1/1957	Production Casing	5.6000				0	7,125	15.5/17#

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Cement Description	Comments
9/1/1957	899	12.0000	8.6250	0	1,527	Circ to surface	
9/1/1957	625	7.8750	5.5000	3,160	7,125	TCC by TS	

Tool/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Description	Comments
4/18/2007	CIBP	6.6000	0.0000	6,950			

Cement Plug Summary

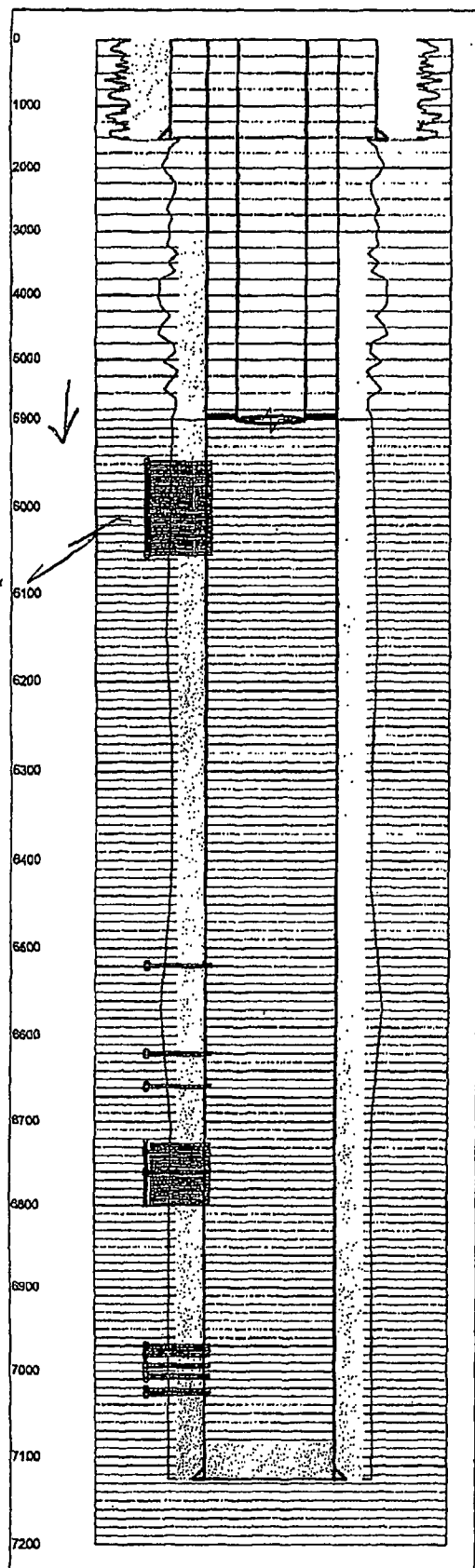
Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	0	5.5000	7,084	7,125	Cml in shoe ft

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing	Perf Comments	Interval Comments
10/18/1957	Open	Drinkard	6,988	6,982			0 D1		
10/18/1957	Open	Drinkard	6,991	6,995			0 D1		
10/18/1957	Open	Drinkard	7,003	7,009			0 D1		
6/23/1962	Open	Drinkard	7,021	7,025			0 D2		
6/23/1962	Open	Drinkard	7,026	7,028			0 D2		
8/5/1978	Squeezed	Tubb	6,725	6,800			0 T1		10 holes
3/10/2005	Open	Blinabry	6,948	6,055	4	440	0 B1		198 holes
4/18/2007	Open	Tubb	6,517	6,521	2	10	120 T2		
4/18/2007	Open	Tubb	6,518	6,522	2	10	120 T2		
4/18/2007	Open	Tubb	6,555	6,560	2	10	120 T2		
4/18/2007	Open	Tubb	6,733	6,737	2	10	120 T2		
4/18/2007	Open	Tubb	6,758	6,762	2	10	120 T2		

Completion History Summary

Date	Comments
9/1/1957	Spud well
10/18/1957	Complete well in Drinkard (D1) perforations.
6/23/1962	Complete well in Drinkard (D2) perforations. Produced these perforations under a packer, isolating the D1 perforations.
8/5/1978	Set CIBP at 6870' and perforate Tubb (T1) from 6725-6800' with 10 holes.
1/6/1981	Drill out CIBP at 6870' and clean out to 7040'
3/15/2005	Set RBP at 6635' and cap w/ 2 sx sand. Perforate Blinabry (B1) perforations and produce from B1 perforations.
4/16/2007	Pull RBP at 6635' and run CNL and CIL from 5500-6950'. Set CIBP at 6950' and cap w/ 2 sx cement. Perforate Tubb (T2) parts from 6517-6762' with 45 holes.



PROPOSED COMPLETION

Last Updated:

5/6/2009 5:06:28 PM

Field Name	Lesse Name		Well No.
County	Blankenship		2
State	APL	GL (R)	KB (R)
Lea	New Mexico	30-025-07787	3567 3568
Sec.	Twp/Bk	Range/Svy	Footage
L-12	20S	38E	2075' FSL & 555' FWL from Section
Spud Date	Comp. Date	Prepared By	Last Updated
8/1/1957	10/18/1957	JLF	5/6/2009
Current Status			
Currently producing from Blinberry and Tubb perforations.			

Mole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
8/1/1957	12.0000	0	1,527	
8/1/1957	7.8750	1,527	7,125	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Top (KB ft)	Bottom (KB ft)
	Tubing	2.8750	6.50	J55	0	5,800
8/1/1957	Surface Casing	8.6250	32.00		0	1,527
8/1/1957	Production Casing	5.5000			0	7,125

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
8/1/1957	698	12.0000	8.6250	0	1,527
8/1/1957	625	7.8750	5.5000	3,160	7,125

Tools/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
	Pkr	5.5000	2.8750	5,800	
4/18/2007	CIBP	5.5000	0.0000	6,950	

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)
8/1/1957	0	5.5000	7,084	7,125

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing
10/18/1957	Open	Drinkard	8,988	8,982			0
10/18/1957	Open	Drinkard	8,991	8,985			0
10/18/1957	Open	Drinkard	7,003	7,009			0
8/23/1962	Open	Drinkard	7,021	7,025			0
8/23/1962	Open	Drinkard	7,028	7,028			0
8/5/1979	Squeezed	Tubb	6,725	6,800			0
3/10/2005	Open	Blinberry	6,946	6,055	4	440	0
4/18/2007	Open	Tubb	6,617	6,621	2	10	120
4/18/2007	Open	Tubb	6,618	6,622	2	10	120
4/18/2007	Open	Tubb	6,658	6,660	2	10	120
4/18/2007	Open	Tubb	6,733	6,737	2	10	120
4/18/2007	Open	Tubb	6,768	6,762	2	10	120

Completion History Summary

Date	Comments
8/1/1957	Spud well
10/18/1957	Complete well in Drinkard (D1) perforations.
8/23/1962	Complete well in Drinkard (D2) perforations. Produced these perforations under a pecker, isolating the D1 perforations.
8/5/1979	Set CIBP at 6870' and perforate Tubb (T1) from 6725-6800' with 10 holes.
1/8/1981	Drill out CIBP at 6870' and clean out to 7040'
3/15/2005	Set RBP at 6835' and cap w/ 2 ex sand. Perforate Blinberry (B1) perforations and produce from B1 perforations.
4/16/2007	Pull RBP at 6835' and run CNL and CIL from 6500-6950'. Set CIBP at 6950' and cap w/ 2 ex cement. Perforate Tubb (T2) perfs from 6517-6762' with 45 holes.

Last Updated:

5/6/2009 5:06:28 PM PROPOSED COMPLETION

Field Name	Lease Name	Well No.	County	State	API	GL (ft)	KB (ft)
House	Blankenship	2	Lea	New Mexico	30-025-07787	3557	2568
Sec.	Twp/Blk	Rng/3vy	Footage	Spud Date	Comp. Date	Prepared By	Last Updated
L-12	20S	38E	207'9' FSL & 555' FVL from Section	9/1/1957	10/18/1957	JLF	6/8/2008
Current Status							
Currently producing from Blinbery and Tubb perforations.							

Detailed Summaries

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	12.0000	0	1,527	
9/1/1957	7.8750	1,527	7,125	

Tubular Summary

Date	Description	OD (in)	WA (lb/ft)	Grade	Coupling	Top (KB ft)	Bottom (KB ft)	Comments
	Tubing	2.8750	8.50	J65	EUE	0	5,900	
9/1/1957	Surface Casing	8.6250	32.00			0	1,527	
9/1/1957	Production Casing	5.5000				0	7,125	18.5/17#

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Cement Description	Comments
9/1/1957	698	12.0000	8.6250	0	1,527	Cm to surface	
9/1/1957	625	7.8750	5.5000	3,160	7,125	TOC by TS	

Tools/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Description	Comments
	PR	5.5000	2.8750	5,900			
4/18/2007	CIBP	5.5000	0.0000		8,950		

Cement Plug Summary

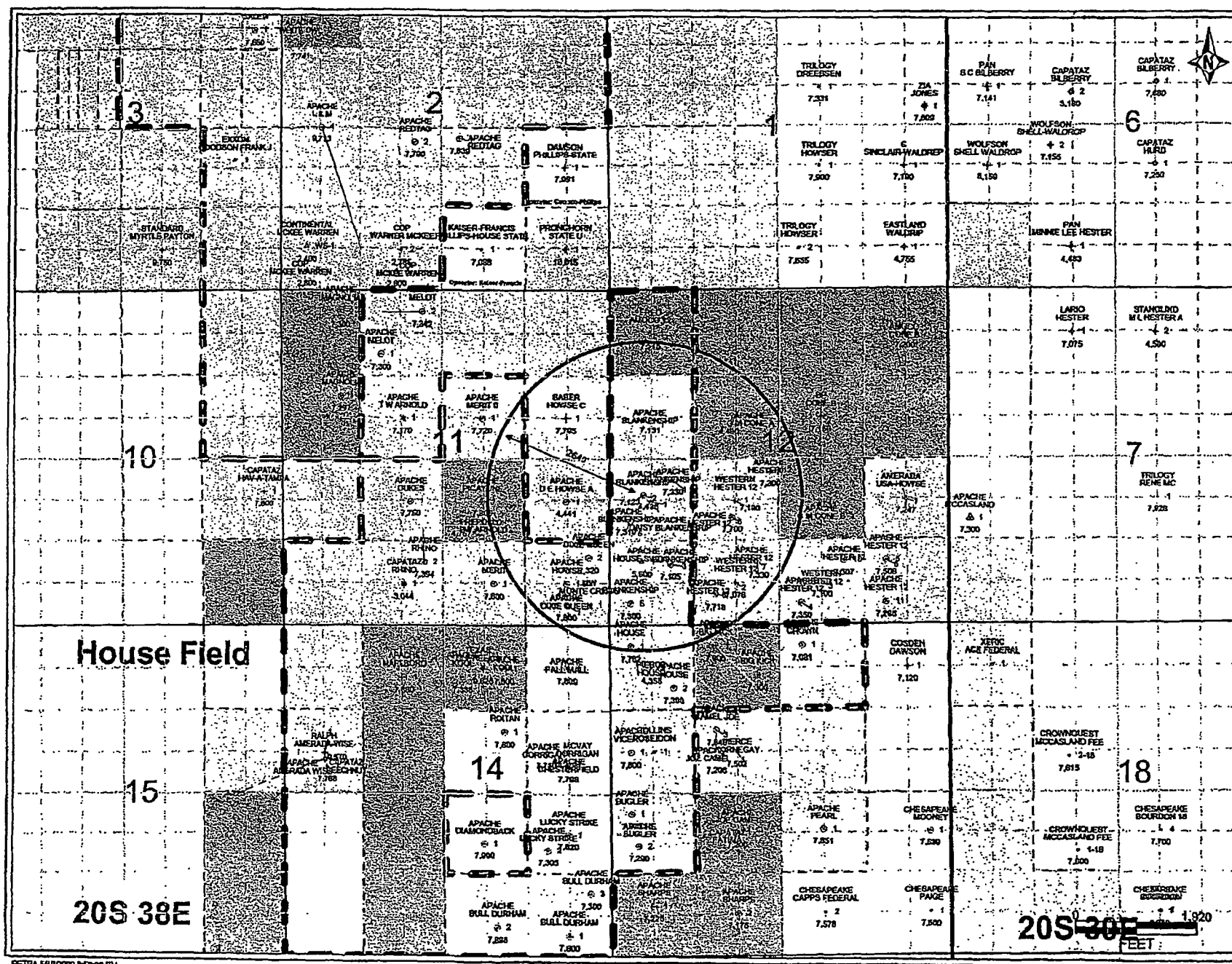
Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
9/1/1957	0	5.6000	7,084	7,125	Cm1 in shoe ft

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing	Perf Comments	Interval Comments
10/18/1957	Open	Drinkard	6,968	6,982			0D1		
10/18/1957	Open	Drinkard	6,991	6,995			0D1		
10/18/1957	Open	Drinkard	7,003	7,009			0D1		
8/23/1962	Open	Drinkard	7,021	7,025			0D2		
8/23/1962	Open	Drinkard	7,028	7,028			0D2		
9/5/1978	Squeezed	Tubb	6,725	8,800			0T1		10 holes
3/10/2005	Open	Blinbery	5,946	6,055	4	440	0B1		198 holes
4/18/2007	Open	Tubb	6,517	6,521	2	10	120T2		
4/18/2007	Open	Tubb	6,618	6,622	2	10	120T2		
4/18/2007	Open	Tubb	6,656	6,660	2	10	120T2		
4/18/2007	Open	Tubb	6,733	6,737	2	10	120T2		
4/18/2007	Open	Tubb	6,758	6,762	2	10	120T2		

Completion History Summary

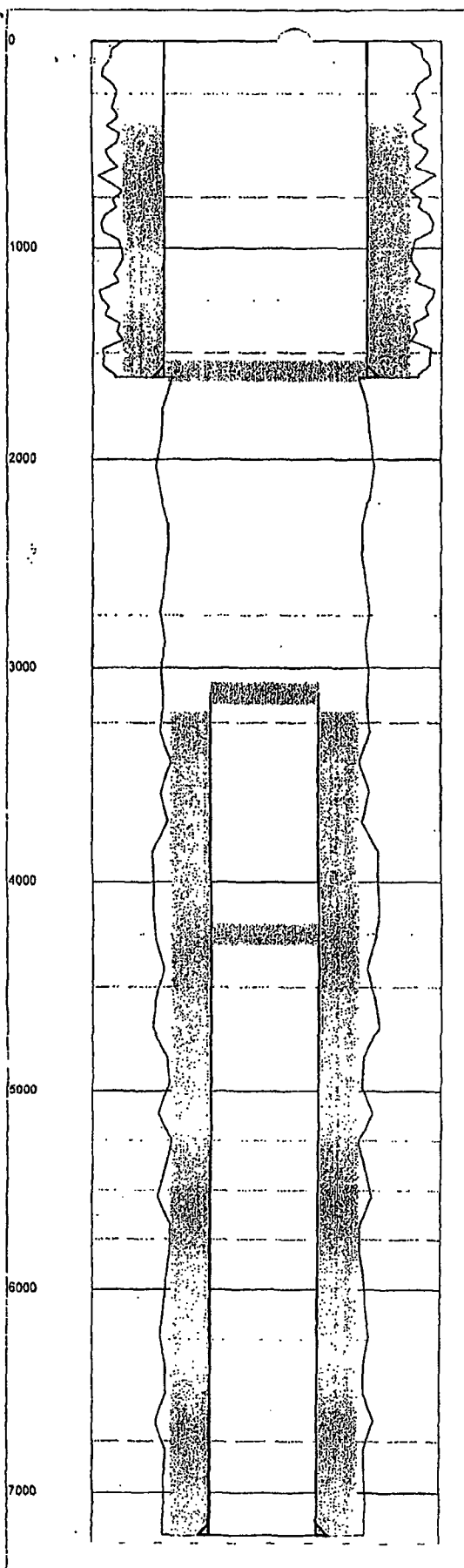
Date	Comments
9/1/1957	Spud well
10/18/1957	Complete well in Drinkard (D1) perforations.
8/23/1962	Complete well in Drinkard (D2) perforations. Produced these perforations under a packer, isolating the D1 perforations.
9/5/1978	Set CIBP at 6870' and perforate Tubb (T1) from 6725-6800' with 10 holes.
1/8/1981	Drill out CIBP at 6870' and clean out to 7040'
3/15/2005	Set RBP at 6635' and cap w/ 2 sx sand. Perforate Blinbery (B1) perforations and produce from B1 perforations.
4/18/2007	Pull RBP at 6635' and run CNL and CIL from 5500-6850'. Set CIBP at 6850' and cap w/ 2 sx cement. Perforate Tubb (T2) perfs from 6517-6762' with 45 holes.



РЕСТА КИ ПОДРОБНО 9-57-08 014

Well ID	Operator Name	Lease Name	Well Num	TOC-Ex	Surf Size	Surf Depth	CMC-Ex	TOC-Ex	Surf Size	Surf Depth	CMC-Ex	TOC-Ex	Surf Size	Surf Depth	CMC-Ex	TOC-Ex	Completion Interval
30-025-29101	YATES G FRED	AMOCO 12	1	7210	8.625	1612	500	398					4.5	7210	1500	3200	7010-7028; 7037-7038; 6546-6557; 4310-4320; 4310-4320
30-025-36745	APACHE CORP	BIG KICK	1	7800	8.625	1640	775	Surface				0	5.5	7800	1550	Surface	6969-7038; 6036-6802
30-025-07768	APACHE CORP	BLANKENSHIP	1	7125	12.75	319	320	Surface	8.625	4275	0		5.5	7125	693	3107	6990-7034; 7016-7034; 7012-7016; 4281-4325
30-025-07767	APACHE CORP	BLANKENSHIP	2	7125	8.75	1539	1100	Surface			0		5.5	7125	625	3160	6968-7009; 5948-6055
30-025-07768	APACHE CORP	BLANKENSHIP	3	7105	13.375	320	325	Surface	8.625	3204	1200	291	5.5	7090	1100	712	7023-7029; 6874-6747; 5942-608
30-025-38397	APACHE CORP	BLANKENSHIP	4	7330	8.625	1575	800	Surface			0		5.5	7330	1350	Surface	6034-6787; 6960-7048
30-025-38399	APACHE CORP	BLANKENSHIP	5	7300	8.625	1570	800	Surface			0		5.5	7300	1600	Surface	6034-6734; 6024-6734; 6956-7025
30-025-38400	APACHE CORP	BLANKENSHIP	6	7310	8.625	1600	850	Surface			0		5.5	7310	1500	Surface	6046-6404
30-025-07770	APACHE CORP	CONE A	1	7078	13.375	318	400	Surface	7.625	4480	200	2802	5.5	7032	200	5872	4405-4440; 4354-4382; 4300-4340; 7032-7078; 6638-6817
30-025-36421	APACHE CORP	DIXIE QUEEN	1	7800	13.375	80	50	10	8.625	1591	740	Surface	5.5	7800	1730	Surface	6688-6736
30-025-38561	APACHE CORP	DIXIE QUEEN	2	7320	8.625	1596	750	Surface			0		5.5	7320	1200	363	6044-6748
30-025-12549	WESTERN EQUIPMENT CO	HESTER 12	1	7100	8.625	1685	550	350			0		5.5	7099	550	3910	7022-7050; 6910-6954; 4274-4416
30-025-07773	WESTERN EQUIPMENT CO	HESTER 12	2	7100	8.625	1633	550	298			0		5.5	7100	400	4781	6988-7056
30-025-36795	APACHE CORP	HESTER 12	6	7718	8.625	1596	800	Surface			0		5.5	7718	1925	Surface	6018-6377; 6018-6785; 6018-7008
30-025-38369	APACHE CORP	HESTER 12	7	7330	8.625	1585	800	Surface			0		5.5	7330	1350	Surface	6036-6815; 6036-7030
30-025-38076	APACHE CORP	HESTER 12	8	7700	8.625	1578	800	Surface			0		5.5	7700	1900	Surface	6033-6710
30-025-38791	APACHE CORP	HESTER 12	9	7347	8.625	1605	750	Surface			0		5.5	7347	1190	448	6064-6352; 6979-7084
30-025-07774	APACHE CORP	HOUSE	1	7750	8.625	1700	900	Surface			0		4.5	7750	800	4079	6927-7019; 6008-6011
30-025-07763	APACHE CORP	HOUSE A	1	4440	13.375	317	400	Surface	8.625	3841	750	2020	5.5	4438	250	2989	4406-4430; 4362-4388
30-025-07764	APACHE CORP	HOUSE B	1	8112	13.375	305	300	Surface	9.625	4530	950	2600	5.5	7650	460	5500	6930-7000; 7020-7060; 4264-4303
30-025-22169	APACHE CORP	HOUSE C	1	7810	9.625	1547	800	Surface	7	4476	500	1351	4.5	7810	700	4598	7214-7782; 6964-7033; 7300-7649
30-025-34734	APACHE CORP	PICAYUNE	1	7805	8.625	1630	595	166			0		5.5	7805	1425	Surface	6967-7090; 5962-7353

Proposed
Paddock
Blankenship 2
5946-6055.



CURRENT COMPLETION

Last Updated:

5/27/2009 2:25:17 PM

Field Name		Lease Name		Well No.	
House		Amoco 12		1	
County	State	API	GL (ft)	KB (ft)	
Lea	New Mexico	30-025-29101	0	0	0
Sec.	Twp/Blk	Rng/Svy	Footage		
D-12	20S	38E	680' FNL & 680' FWL from Section		
Spud Date	Comp. Date	Prepared By	Last Updated		
		JLF	5/27/2009		
Current Status					
Well is P&A'd					

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
12.2500		0	1,612	
7.8750		1,612	7,210	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Top (KB ft)	Bottom (KB ft)
	Surface Casing	8.6250			0	1,612
	Production Casing	4.5000			3,115	7,210

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
	500	12.2500	8.6250	398	1,612
	1500	7.8750	4.5000	3,200	7,210

Tools/Problems Summary

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)
	35	8.6250	1,534	1,634
	25	4.5000	3,085	3,185
	25	4.5000	4,200	4,300

Perf Summary

Completion History Summary

Date	Comments
8/30/1985	Well P&A'd

Last Updated:

5/27/2009 2:25:17 PM CURRENT COMPLETION

Field Name	Lease Name	Well No.	County	State	API	GL (ft)	KB (ft)
House	Amoco 12	1	Lea	New Mexico	30-025-29101	0	0
Sec.	Twp/Blk	Rng/Svy	Footage	Spud Date	Comp. Date	Prepared By	Last Updated
D-12	209	38E	880' FNL & 860' FWL from Section			JLF	5/27/2009
Current Status							
Well Is P&A'd							

Detailed Summaries

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	12.2500	0	1,612	
	7.8750	1,612	7,210	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Coupling	Top (KB ft)	Bottom (KB ft)	Comments
	Surface Casing	8.6250				0	1,612	
	Production Casing	4.5000				3,115	7,210	

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Cement Description	Comments
	500	12.2500	8.6250	388	1,612		TOC calculated
	1500	7.8750	4.5000	3,200	7,210		TOC calculated

Tools/Problems Summary

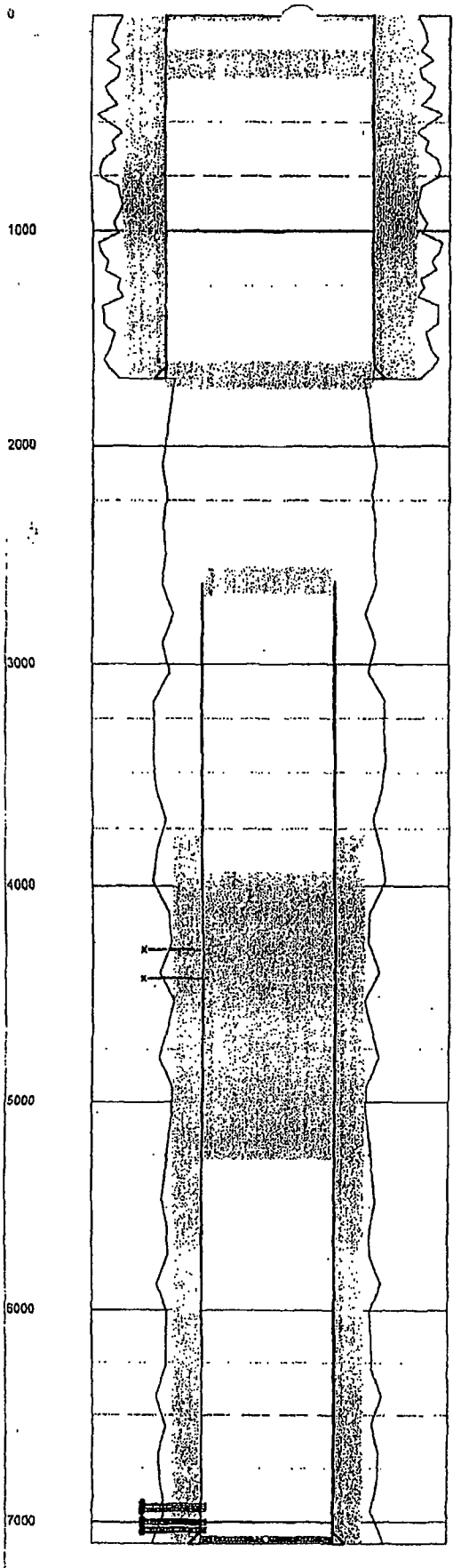
Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	35	8.6250	1,534	1,834	
	25	4.5000	3,065	3,165	
	25	4.5000	4,200	4,300	

Perf Summary

Completion History Summary

Date	Comments
8/30/1985	Well P&A'd



CURRENT COMPLETION

Last Updated:

2/26/2009 2:26:46 PM

Field Name			Lease Name		Well No.
House			Hester 12		1
County	State	API	GL (ft)	KB (ft)	
Lea	New Mexico	30-025-07773	3559	3566	
Sec.	Twp/Blk	Rng/Svy	Footage		
12	20S	38E	560' FSL & 1980' FWL from Section		
Spud Date		Comp. Date	Prepared By	Last Updated	
8/27/1956		10/4/1956	JLF	2/26/2009	
Current Status					
Plugged and abandoned.					

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	12.2500	0	1,885	
	7.8750	1,885	7,100	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Top (KB ft)	Bottom (KB ft)
	Surface Casing	8.6250	32.00	J55	0	1,885
	Production Casing	6.6000			2,830	7,099

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
	560	12.2500	8.6250	0	1,885
	550	7.8750	5.5000	3,780	7,099

Tools/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
	FC	6.5000	0.0000	7,085	

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)
	10	8.6250	0	25
	40	8.6250	160	300
	50	8.6250	1,805	1,735
	50	5.5000	2,555	2,681
	125	5.5000	3,940	5,272
	0	5.5000	7,085	7,099

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing
	Squeezed	San Andres	4,274	4,284			0
	Squeezed	San Andres	4,408	4,418			0
	Isolated	Orinkard	8,910	8,954			0
	Isolated	Orinkard	6,987	7,014			0
	Isolated	Orinkard	7,022	7,050			0

Completion History Summary

Last Updated:

2/26/2009 2:26:46 PM CURRENT COMPLETION

Field Name	Lease Name	Well No.	County	State	API	GL (ft)	KB (ft)
Hester	Hester 12	1	Lea	New Mexico	30-025-07773	3559	3568
Sec.	Twp/Blk	Rng/Svy	Footage	Spud Date	Comp. Date	Prepared By	Last Updated
12	20S	38E	560' FSL & 1960' FWL from Section	8/27/1956	10/4/1956	JLF	2/26/2009
Current Status							
Plugged and abandoned.							

Detailed Summaries

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
12.2500		0	1,685	
7.8750		1,685	7,100	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Coupling	Top (KB ft)	Bottom (KB ft)	Comments
	Surface Casing	8.6250	32.00	J55		0	1,685	
	Production Casing	5.5000				2,830	7,099	15.5 and 17#, 2630' pulled when plugged

Casing Cement Summary

Date	No. Sk	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Cement Description	Comments
	550	12.2500	8.6250	0	1,685		Circulate cement
	550	7.8750	5.5000	3,760	7,099		

Tools/Problems Summary

Date	Tool Type	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Description	Comments
2	FC	5.5000	0.0000	7,065			

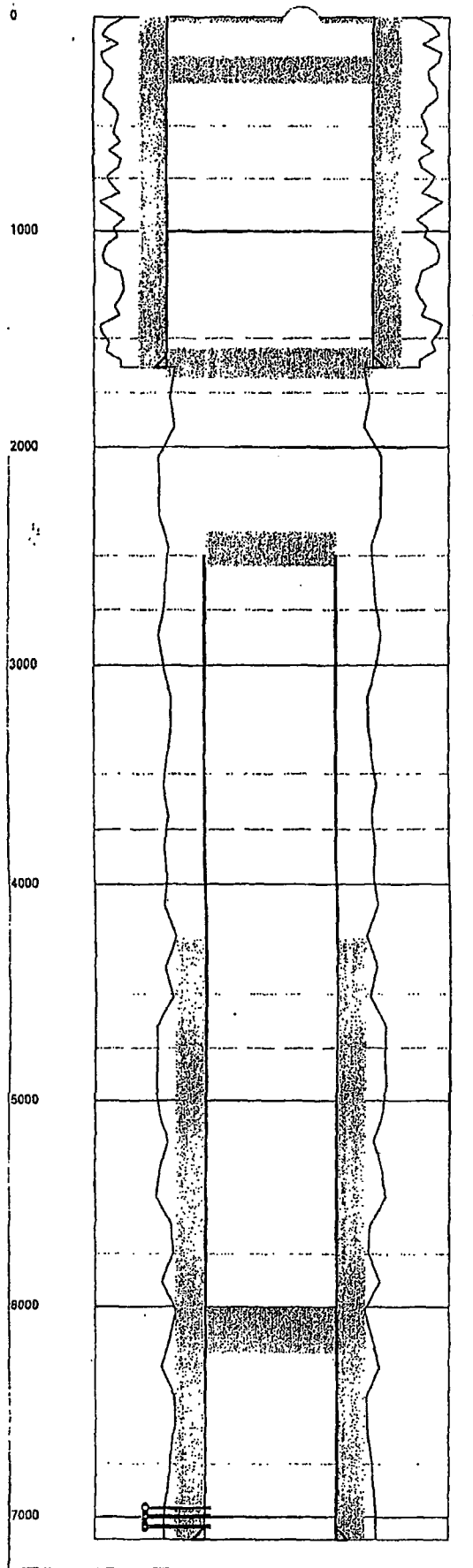
Cement Plug Summary

Date	No. Sk	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	10	8.6250	0	25	
	40	8.6250	180	300	
	50	8.6250	1,605	1,735	
	50	5.5000	2,555	2,681	
	125	5.5000	3,840	5,272	
	0	5.5000	7,085	7,099	Cmt in shoe lit

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing	Perf Comments	Interval Comments
	Squeezed	San Andres	4,274	4,284		0			10 shots
	Squeezed	San Andres	4,406	4,416		0			4 shots
	Isolated	Drinkard	6,910	6,954		0			
	Isolated	Drinkard	6,987	7,014		0			
	Isolated	Drinkard	7,022	7,050		0			

Completion History Summary



CURRENT COMPLETION

Last Updated:

2/26/2009 2:30:17 PM

Field Name		Lease Name		Well No.	
House		Heater 12		2	
County	State	API	GL (ft)	KB (ft)	
Lea	New Mexico	30-025-07773	0	3568	
Sec.	Twp/Blk	Rng/Svy	Footage		
12	20S	38E	860' FSL & 1980' FWL from Section		
Spud Date	Comp. Date	Prepared By	Last Updated		
8/30/1958	10/2/1958	JLF	2/26/2009		
Current Status					
Plugged and abandoned.					

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
12.2500		0	1,833	
7.8750		1,833	7,108	

Tubular Summary

Date	Description	OD (in)	Wt (lb/ft)	Grade	Top (KB ft)	Bottom (KB ft)
	Surface Casing	8.6250	32.00	J65	0	1,833
	Production Casing	6.5000			2,500	7,108

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)
	850	11.0000	8.6250	0	1,833
	550	7.8750	5.5000	4,250	7,108

Tools/Problems Summary

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)
	10	8.6250	0	25
	35	8.6250	178	300
	40	8.6250	1,544	1,684
	50	8.6250	1,683	1,684
	50	8.6250	1,683	1,683
	40	5.5000	2,390	2,550
	25	5.5000	6,002	6,223

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing
	Open	Drinkard	6,952	6,983			0
	Open	Drinkard	6,988	7,008	4	84	0
	Open	Drinkard	7,036	7,056	4	84	0

Completion History Summary

Last Updated:

2/26/2009 2:30:17 PM CURRENT COMPLETION

Field Name	Lease Name	Well No.	County	State	API	GL (ft)	KB (ft)
House	Hesler 12	2	Lea	New Mexico	30-025-07773	0	3500
Sec.	Twp/Blk	Rng/Svy	Footage	Spud Date	Comp. Date	Prepared By	Last Updated
12	20S	38E	860' FSL & 1980' FWL from Section	8/30/1956	10/2/1956	JLF	2/26/2009

Current Status

Plugged and abandoned.

Detailed Summaries

Hole Summary

Date	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	12.2500	0	1,833	
	7.8750	1,833	7,106	

Tubular Summary

Date	Description	OD (in)	WT (lb/ft)	Grade	Coupling	Top (KB ft)	Bottom (KB ft)	Comments
	Surface Casing	8.6250	32.00	J65		0	1,833	
	Production Casing	5.5000				2,500	7,106	15.5 & 17#. Pulled 2500' of pipe when well was plugged.

Casing Cement Summary

Date	No. Sx	OD (in)	ID (in)	Top (KB ft)	Bottom (KB ft)	Cement Description	Comments
	650	11.0000	8.6250	0	1,833		Circulate cement
	550	7.8750	5.5000	4,260	7,106		

Tools/Problems Summary

Cement Plug Summary

Date	No. Sx	OD (in)	Top (KB ft)	Bottom (KB ft)	Comments
	10	8.6250	0	25	
	35	8.6250	178	300	
	40	8.6250	1,544	1,684	
	50	8.6250	1,683	1,684	
	60	8.6250	1,683	1,683	No fill tagged
	40	5.5000	2,390	2,550	
	25	5.5000	6,002	6,223	

Perf Summary

Date	Perf Status	Formation	Top (KB ft)	Bottom (KB ft)	SPF	Shots	Phasing	Perf Comments	Interval Comments
	Open	Drinkard	6,952	6,963			0		4 holes
	Open	Drinkard	6,968	7,008	4	84	0		
	Open	Drinkard	7,036	7,058	4	84	0		

Completion History Summary

ITEM VII OF NEW MEXICO OCD FORM C-108
DATA ON PROPOSED OPERATIONS
BLANKENSHIP #2

- 1) Proposed average initial injection rate is 500 bwpd.
Maximum injection rate should not exceed 5,000 bwpd.
- 2) The injection system will be operated as a closed system.
- 3) Proposed maximum pressure is 1189 psi (5946' * 0.2 psi/ft) but will not exceed the pressure limitations ordered by the Division.
- 4) Source water will come from the Blinebry, Tubb, Drinkard
- 5) Not Applicable.

ITEM VIII OF NEW MEXICO OCD FORM C-108
GEOLOGIC DATA ON THE INJECTION ZONE & UNDERGROUND DRINKING WATER
HOUSE FIELD

Paddock

The formations being targeted for water injection are the Blinberry, Tubb and Drinkard at depths ranging from approximately 5900' to 7100'. These formations are Leonardian in age and are a sequence of marine carbonates which have undergone diagenesis, predominantly in the form of dolomitization. A five percent porosity cutoff is used to determine "pay" since porosities less than this are considered non-productive at the existing and proposed reservoir pressures and fluid regimes. Net pay isopach maps show the areal extent of the targeted reservoirs. The vertical extent of the reservoir is limited both top and bottom by impermeable shales and carbonates. All injected fluids should remain in the reservoir with the exception of cycling to the surface through well bores.

Based on communications with the New Mexico States Engineer's Roswell office and a review of online files there are 8 fresh water wells (see attached) in the area of review. The deepest of these wells is 90' which is the assumed base of fresh water. All wellbores involved with the proposed injection program are constructed to not allow injection water into this fresh water source.

Line	Start	Finish	Depth (in feet)
10	578836 3606463 12/26/1953	12/27/1954	55
11	578836 3606463 12/26/1953	12/27/1954	55
12	578836 3606463		
13	578836 3607469		
14	578836 3607469		
15	578836 3607469		
16	578836 3607469		
17	578836 3607469		
18	578836 3607469		
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ITEMS IX THROUGH XII OF NEW MEXICO OCD FORM C-108
BLANKENSHIP #2

IX This well will be acid stimulated as needed to eliminate near wellbore skin damage.

X Original logs and test data were filed with the NMOCD upon original completion of the well.

XI See attached water analysis for two fresh water wells.

XII After reviewing the geology in a one and one-half mile radius around the proposed waterflood area there appears no evidence of fractures or any hydrologic connection between the zone of injection and any overlying or underlying strata.

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(808) 228-8121
Lab Team Leader - Shella Hernandez
(432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	44217
Region:	PERMIAN BASIN	Account Manager:	FRANK GARDNER (575) 390-5194
Area:	MONUMENT, NM	Sample #:	372540
Lease/Platform:	GILBERT UNIT	Analysis ID #:	86969
Entity (or well #):	HORSE PEN	Analysis Cost:	\$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 372540 @ 75 °F					
Sampling Date:	10/21/08	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	10/30/08	Chloride:	336.0	9.48	Sodium:	216.0	9.4
Analyst:	KIMBERLY POOLE	Bicarbonate:	220.0	3.61	Magnesium:	41.0	3.37
TDS (mg/l or g/m3):	1378.6	Carbonate:	0.0	0.	Calcium:	164.0	8.18
Density (g/cm3, tonne/m3):	1.001	Sulfate:	391.0	8.14	Strontium:	2.0	0.05
Anion/Cation Ratio:	0.9999998	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	0.9	0.02
		Silicate:			Potassium:	7.5	0.19
Carbon Dioxide:	0 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7.21	Chromium:		
Comments:		pH at time of analysis:			Copper:		
RESISTIVITY 9 OHM-M @ 75°F		pH used in Calculation:		7.21	Lead:		
					Manganese:	0.025	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.10	2.10	-0.91	0.00	-0.98	0.00	-1.13	0.00	0.69	0.00	0.19
100	0	0.23	5.80	-0.91	0.00	-0.92	0.00	-1.12	0.00	0.54	0.00	0.24
120	0	0.37	9.45	-0.80	0.00	-0.83	0.00	-1.09	0.00	0.43	0.00	0.31
140	0	0.51	14.00	-0.88	0.00	-0.71	0.00	-1.05	0.00	0.34	0.00	0.38

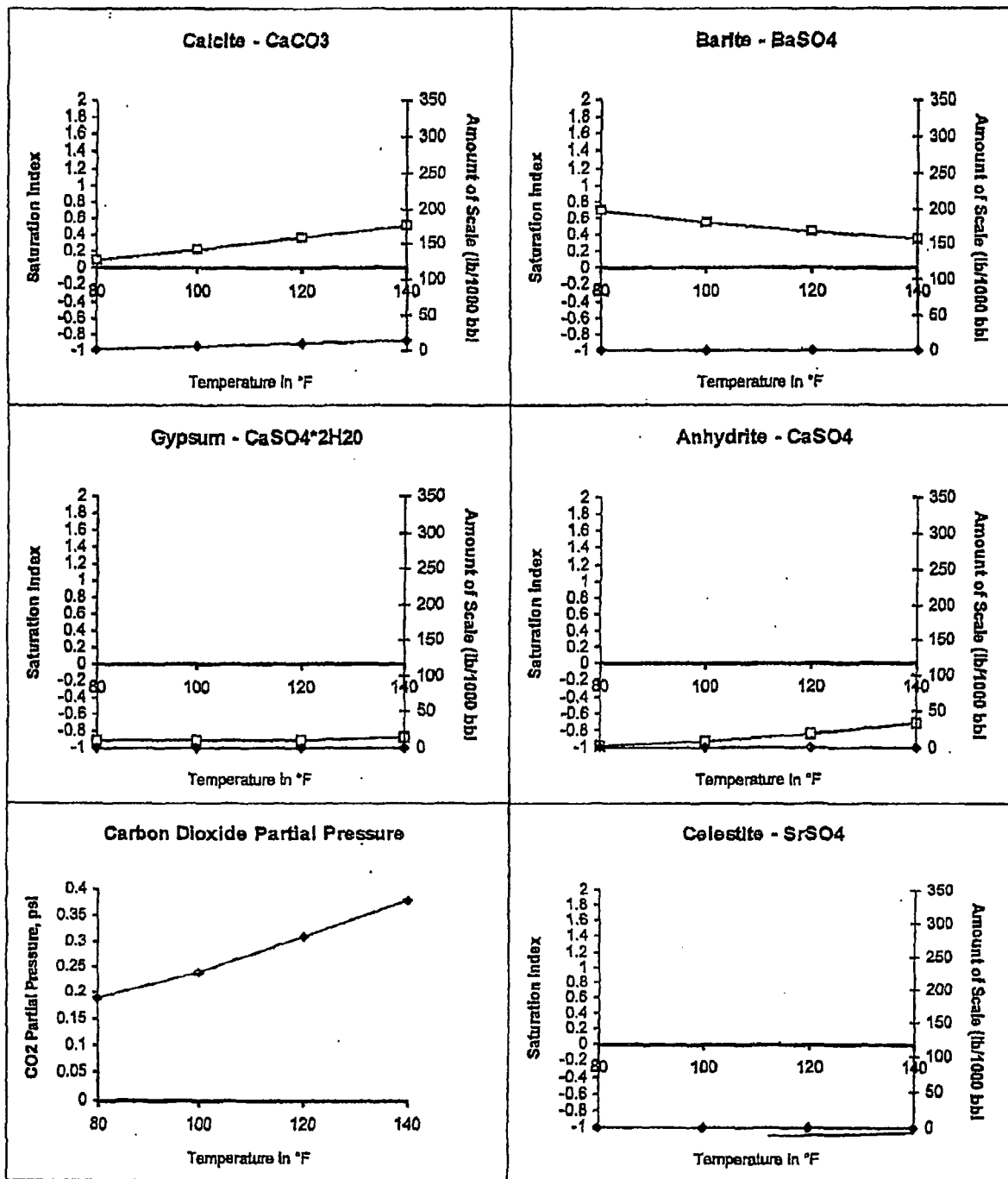
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

Scale Predictions from Baker Petrolite

Analysis of Sample 372540 @ 75 °F for APACHE CORPORATION, 10/30/08



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Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	44217
Region:	PERMIAN BASIN	Account Manager:	FRANK GARDNER (575) 390-5194
Area:	MONUMENT, NM	Sample #:	372539
Lease/Platform:	OSCAR UNIT	Analysis ID #:	86970
Entity (or well #):	HOUSE	Analysis Cost:	\$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 372539 @ 75 °F					
Sampling Date:	10/21/08	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	10/30/08	Chloride:	415.0	11.71	Sodium:	331.2	14.41
Analyst:	KIMBERLY POOLE	Bicarbonate:	305.0	5.	Magnesium:	41.0	3.37
TDS (mg/l or g/m3):	1378.5	Carbonate:	0.0	0.	Calcium:	174.0	8.68
Density (g/cm3, tonne/m3):	1.002	Sulfate:	491.0	10.22	Strontium:	2.0	0.05
Anion/Cation Ratio:	0.9999997	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	0.2	0.01
		Silicate:			Potassium:	16.0	0.41
Carbon Dioxide:	0 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7.03	Chromium:		
Comments:		pH at time of analysis:			Copper:		
RESISTIVITY 7.5 OHM-M @ 75°F		pH used in Calculation:		7.03	Lead:		
					Manganese:	0.025	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
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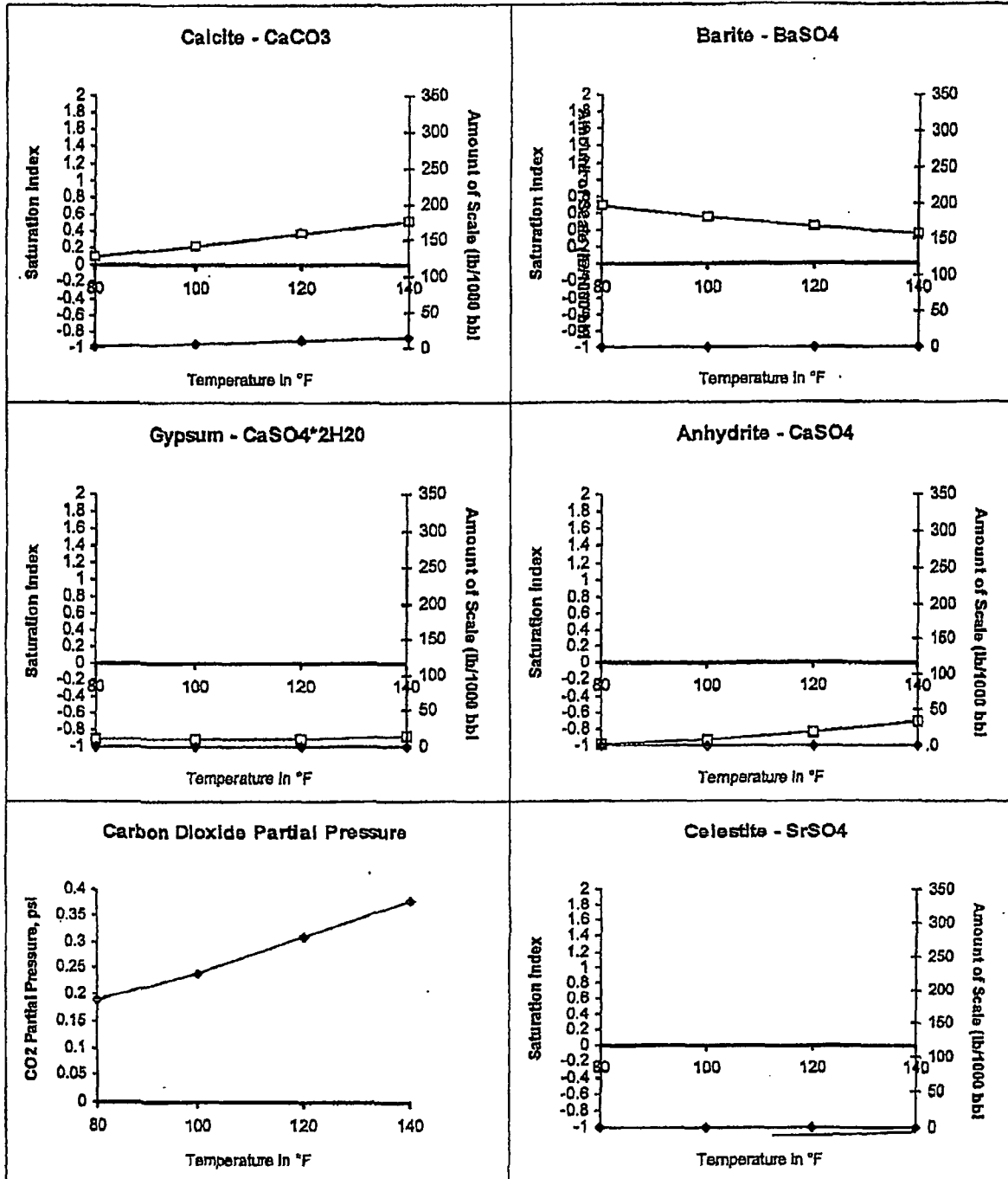
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Scale Predictions from Baker Petrolite

Analysis of Sample 372539 @ 75 °F for APACHE CORPORATION, 10/30/08



PROPOSED ADVERTISEMENT

Case No. 14803 :

Application of Apache Corporation to amend Order No. R-13176 for a secondary recovery project, Lea County, New Mexico. Applicant seeks approval to amend Division Order No. R-13176, approving a pilot secondary recovery project by the injection of water into the Blinebry, Tubb, and Drinkard formations into the Blankenship Well No. 2, located 2075 feet from the south line and 555 feet from the west line of Section 12, Township 20 South, Range 38 East, NMPM, at depths of 6046-7028 feet subsurface, to include the Paddock formation at depths of 5946-6045 feet subsurface. The well is located approximately 3 miles south-southeast of Nadine, New Mexico.

RECEIVED OCD
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