JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213
SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone)
(505) 660-6612 (Cell)
(505) 982-2151 (Fax)

jamesbruc@aol.com

September 29, 2009

14411

Case #13996

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

Dear Florene:

Enclosed for filing, on behalf of Agua Sucia, LLC, are an original and one copy of an application for approval of a water disposal well, together with a proposed advertisement. The advertisement was previously e-mailed to the Division. Please set this matter for the October 29, 2009 Examiner hearing. Thank you.

Very truly yours,

James Bruce

Attorney for Agua Sucia, LLC

Parties Being Notified

Armstrong Energy Corporation
P.O. Box 1973
Roswell, New Mexico 88202

PROPOSED ADVERTISEMENT

Case No. ~~14396~~ 14411 **:**

Application of Agua Sucia, LLC to reinstate Division Administrative Order SWD-559 for a salt water disposal well, Lea County, New Mexico. Applicant seeks an order reinstating Division Administrative Order SWD-559 for a salt water disposal well, approving disposal into the Bone Spring formation in the Government E Well No. 1, located 610 feet from the south line and 1880 feet from the west line of Section 25, Township 19 South, Range 34 East, NMPM, at depths of 9716-10240 feet subsurface. The well is located approximately 15 miles west-northwest of Oil Center, New Mexico.

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

RECEIVED OCD

APPLICATION OF AGUA SUCIA, LLC TO REINSTATE ADMINISTRATIVE ORDER SWD-559 FOR A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

2021 SEP 29 P 3:48

Case No. ~~14396~~ 14411

APPLICATION

Agua Sucia, LLC applies for an order reinstating Division Administrative Order SWD-559 for a salt water disposal well, and in support thereof, states:

1. Division Administrative Order SWD-559 approved salt water disposal into the Government E Well No. 1, located 610 feet from the south line and 1380 feet from the west line of Section 25, Township 19 South, Range 34 East, N.M.P.M., Lea County, New Mexico. The injection interval was 9716-10240 feet subsurface. Applicant is the successor operator of the well.

2. Injection authority for the Government E Well No. 1 terminated due to lack of injection for over one year.

3. A Form C-108 for reinstatement of Division Administrative Order SWD-559 is attached hereto as Exhibit A.

4. The granting 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 application.

Respectfully submitted,

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

Attorney for Agua Sucia, LLC

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: ***Salt Water Disposal*** and the application ***qualifies*** for administrative ***RENEWAL*** approval.

II. OPERATOR: ***Agua Sucia, LLC***
ADDRESS: ***1009 W. Broadway, Hobbs, NM 88241***

Case 14116

CONTACT PARTY: ***Agent: SOS Consulting, LLC – Ben Stone (903) 488-9850***

III. WELL DATA: ***All well data and applicable wellbore diagrams are attached hereto.***

IV. ***This is not an expansion of an existing project.***

V. ***A map is attached*** 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. ***A tabulation is attached*** of data on all wells of public record within the area of review which penetrate the proposed injection zone. ***The data includes*** 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. ***The following data is attached*** 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. ***Appropriate geologic data on the injection zone is attached*** 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. ***No stimulation program is proposed at this time.***

*X. ***There is no applicable logging and test data on the well however, any previous well logs have been filed with the Division and they need not be resubmitted.***

*XI. ***There are no fresh water wells within one mile the proposed salt water disposal well.***

XII. ***An affirmative statement is attached that available geologic and engineering data has been examined and no evidence was found*** of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. ***"Proof of Notice" section on the next page of this form has been completed.***

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: ***Ben Stone*** TITLE: ***Consultant, Agent for Agua Sucia, LLC***

SIGNATURE: _____ DATE: ***8/24/2009***

E-MAIL ADDRESS: ***Agent: SOS Consulting, LLC: info@sosconsulting.us***

* 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:

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

EXHIBIT A

III. WELL DATA – ***The following information and data is included:***

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

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

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE ***pursuant to the following criteria is attached.***

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

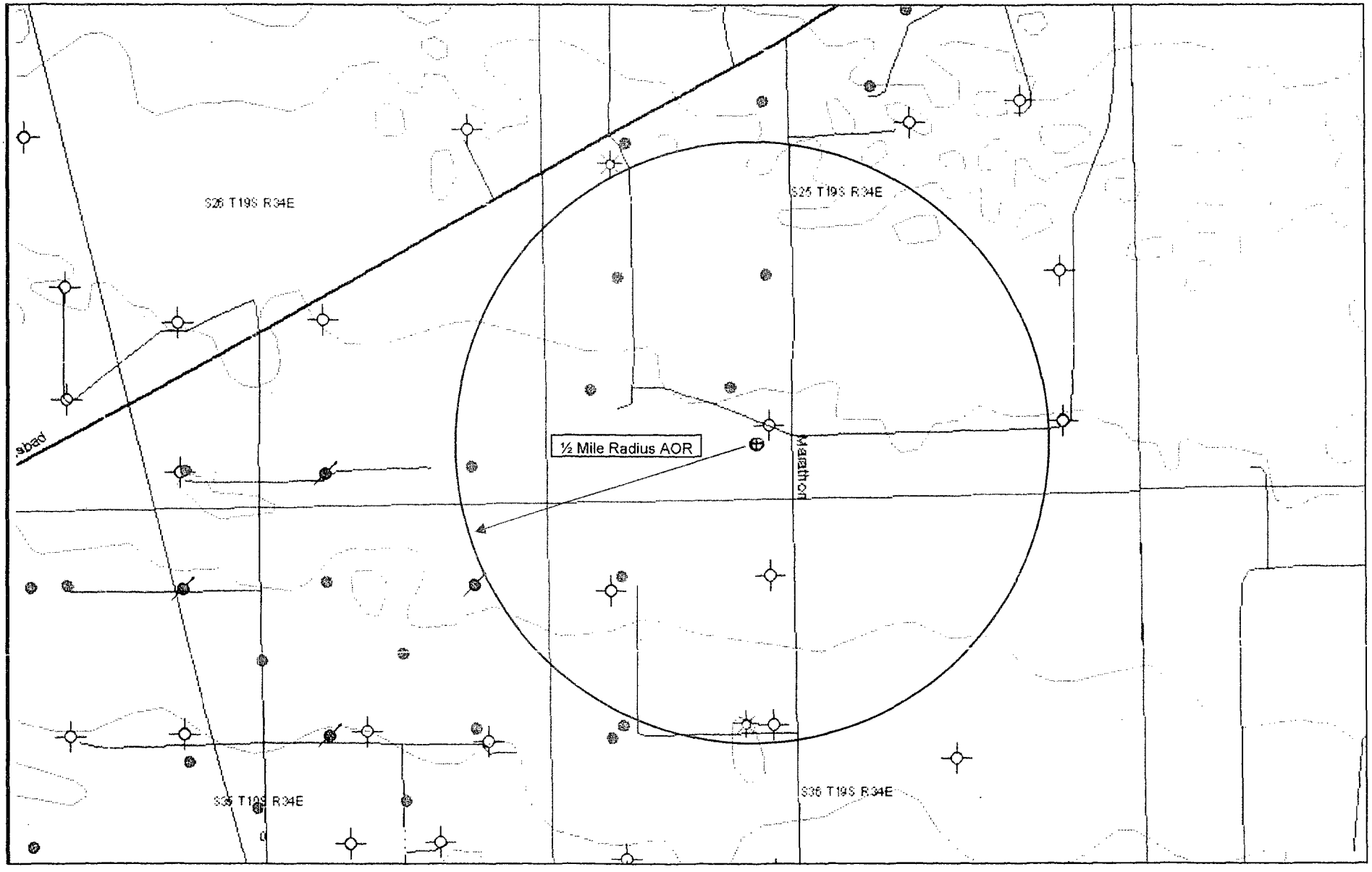
(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

Government 'E' No. 1 – Area of Review



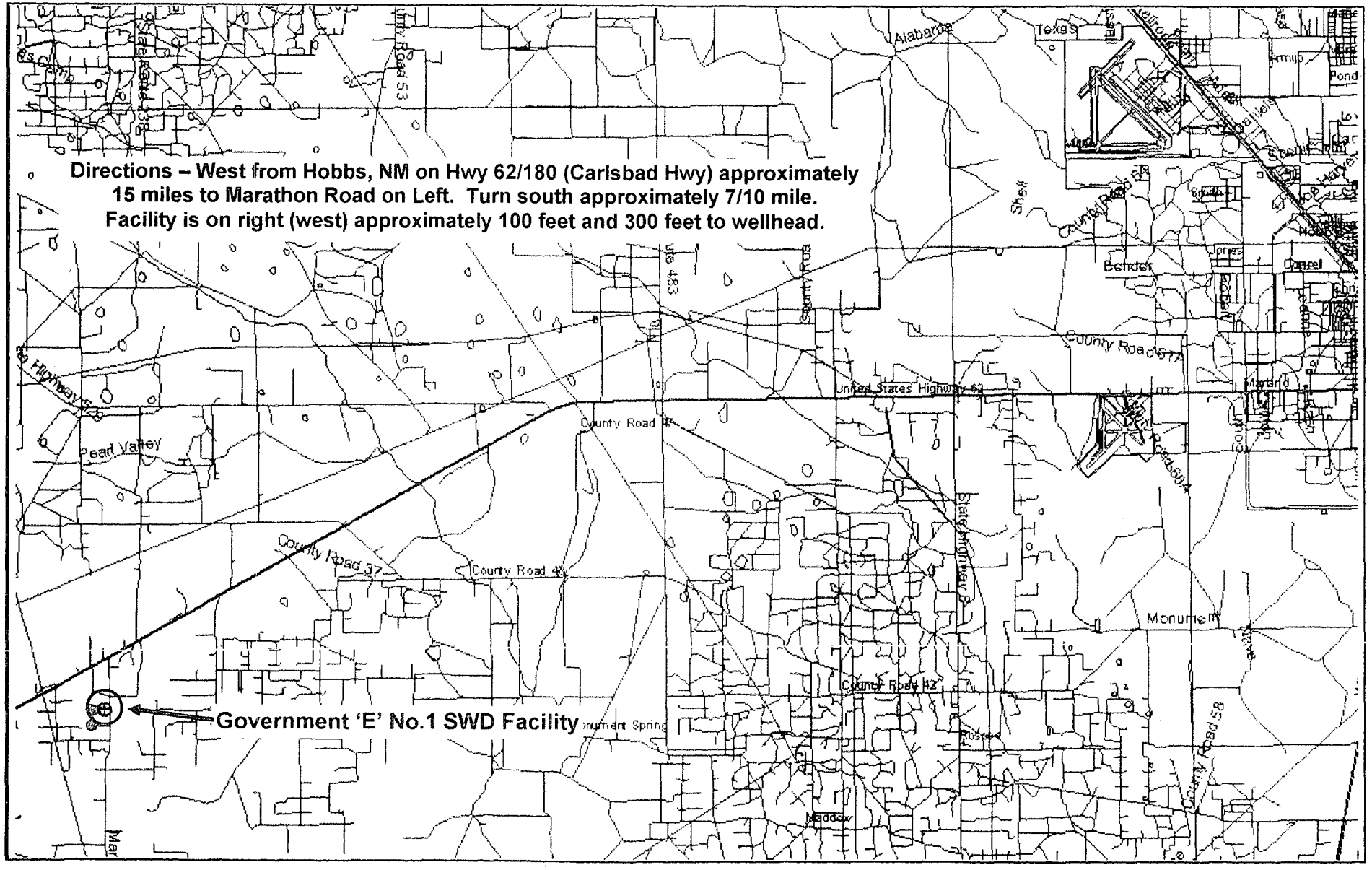
GIS Map by Sylvan Ascent
Drawn 8/24/2009
by Ben Stone, SOS Consulting, LLC
For Agua Sucia, LLC

SOS Consulting, LLC

Well spots generated from
RBDMS database with most
current recordset provided by
NMT Octane AllWells.mdb

C-108 – Location Overview Map

Government 'E' No. 1 SWD Facility – General Location



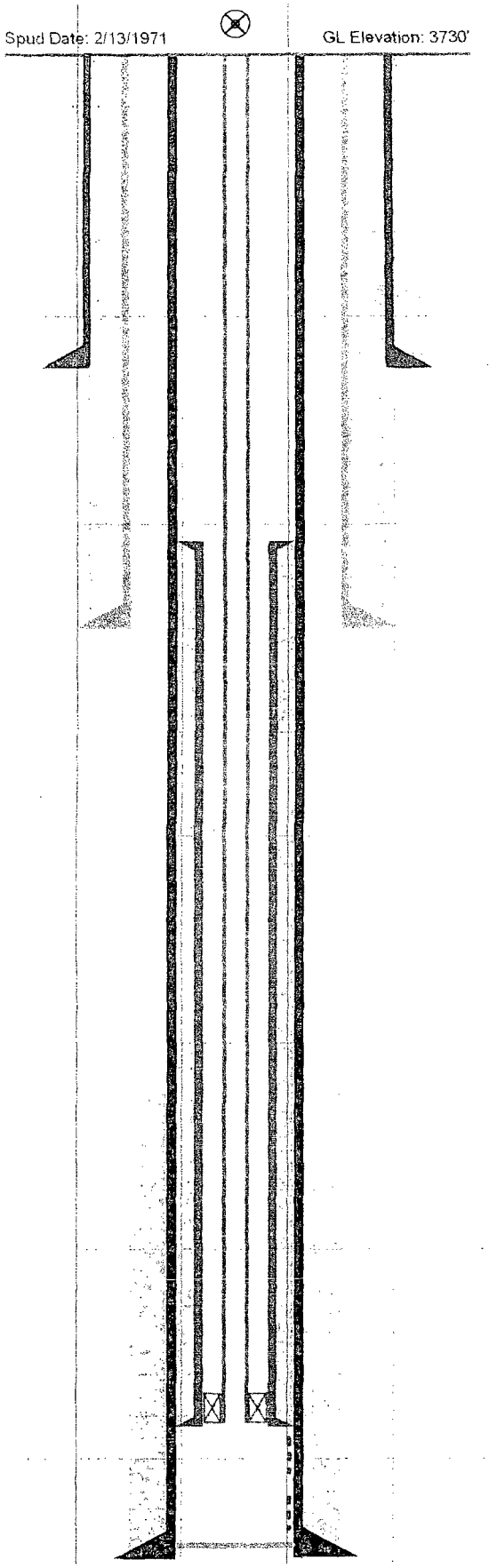
GIS Map by Sylvan Ascent
Drawn 8/24/2009
by Ben Stone, SOS Consulting, LLC
For Agua Sucia, LLC

SOS Consulting, LLC

Well spots generated from
RBDMS database with most
current recordset provided by
NMT Octane AllWells.mdb

Agua Sucia, LLC

PROPOSED / EXISTING
WELL CONFIGURATION



SOS Consulting, LLC

Government 'E' No. 1

API No. 30-025-23708
Location: 610' FSL & 1880' FWL
UL 'N', Sec. 25, Twp 19S, Rng 34E, NMPM
Latitude: 32.625818 Longitude: -103.516315
Lea County, New Mexico

SWD; Bone Spring (Pool No.96095)

Formation: Red Beds

Surface: 11.75" 42# @ 400' (Borehole 15")
Cement: 450 Sacks Class H w/2% CaCl
from 400' to 0' (Circulated)

Formation: Salado / Anhydrite Mix (Top ~1800')

Formation: Yates (Top ~3500')

Intermediate: 8.625" 32# @ 4089' (Borehole 11.0")
Cement: 775 Sacks TLW & Pozmix from 4089' to 2200' (Calc.)

Formation: Queen (Top ~4400')

Formation: San Andres (Top ~6050')

Casing/Tubing Annulus loaded with Packer Fluid.

Formation: Cherry Canyon (Top 6490')

Tubing: 2.375" (184 jnts) and 2.875" (113 jnts)
Plastic Coated @ 9579'

Packer: 4.0" (Nominal) PKR (w/ On/Off Tool) @ 9596'

Formation: Bone Spring (Top 9716')

Liner: 4.0" Flush Joint 15.6# @ 9597' to 3843'
Cement: 240 Sacks Class H from 9547' to 3843'

Perforations Top: 9716' - 20'
Bottom: 10,225' - 36'

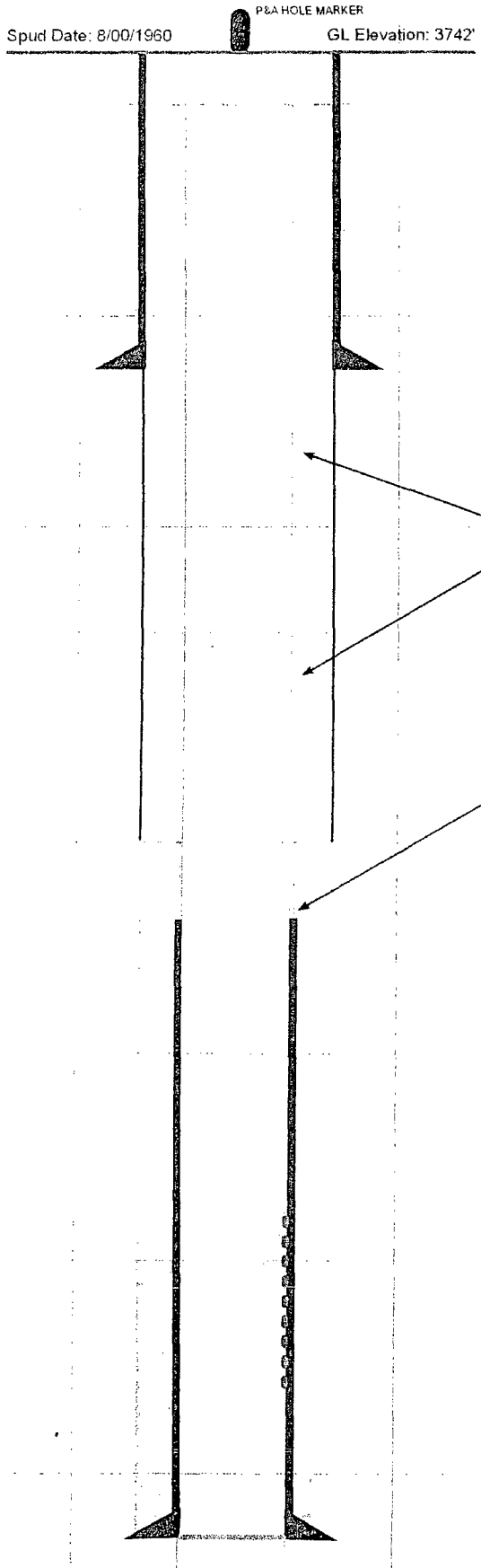
Formation: Lower Bone Spring (Top 10,222')

Production: 5.5" 17# @ 10,300' (Borehole 7.875")
Cement: 500 Sacks Class H from 10,300' to 7700' (Temp Srvy)
PBTD: 10,277'

Pre-ONGARD Operator

CURRENT WELL CONFIGURATION
Plugged and Abandoned 12/5/1960

Superior Federal No. 1
API No. 30-025-02396
Location: 660' FSL & 1980' FWL
Section 25, Twp 19S, Rng 34E, NMPM
Latitude: 32.625956 Longitude: -103.515989
Lea County, New Mexico



Cement Plug: 5 sx 20' - 0'

Cement Plug: 25 sx 260' - 160'

Surface: 8.625" 26# @ 210' (Borehole 11")
Cement: 200 Sacks Class C from 210' to 0' (Circulated)

Formation: Anhydrite (Top 1813')

Mud Between Plugs

Cement Plug: 20 sx 1900' - 1800'

4.5" Casing shot off at 3228'.

Cement Plug: 20 sx 3248' - 3148'

Formation: Yates (Top Apprx. 3500')

Hole filled with mud prior to pumping plugs.

Formation: Queen (Top Apprx. 4400')

Cement Plug: 15 sx 4830' - 4658'

Perforations: 4559' - 4965'
4784' - 4792'
4909' - 4913'

Production: 4.5" 11.6# @ 3665' (Borehole 6.25")
Cement: 275 Sacks Class C from 5095' to 3050' (by CALC. Perhaps closer to 4.5" recovery depth.)

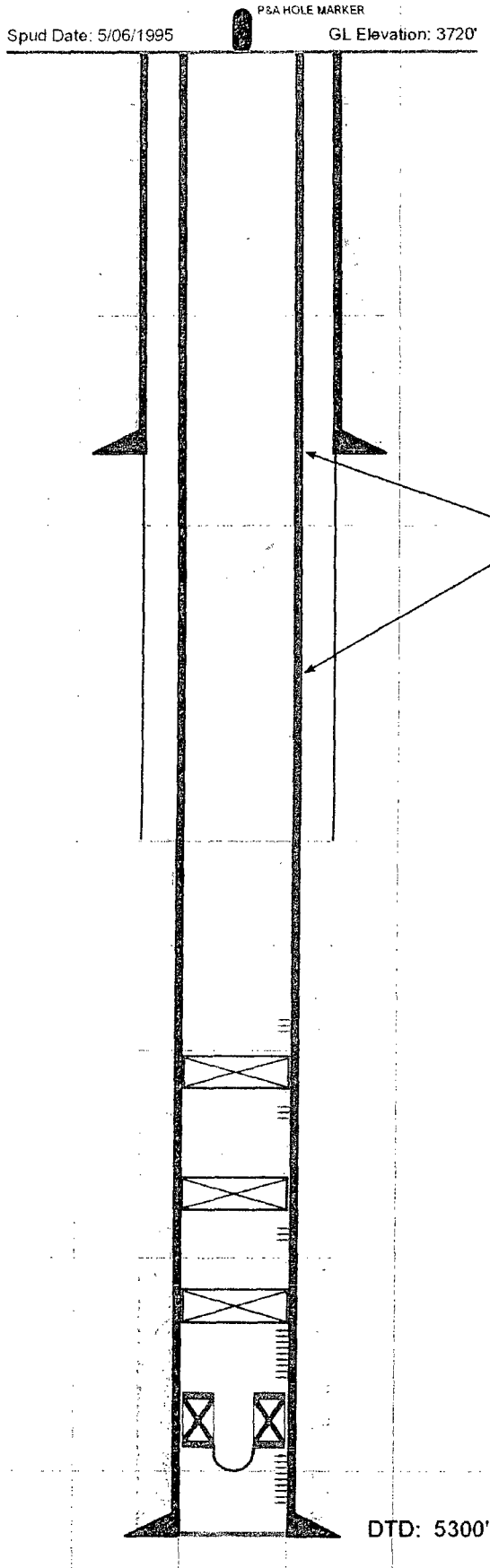
TD: 5095'

SOS Consulting, LLC

TRILOGY OPERATING, INC.

CURRENT WELL CONFIGURATION
Plugged and Abandoned 7/11/1997

Pearl State No. 1
API No. 30-025-32935
Location: 1980' FNL & 1980' FWL
Section 36, Twp 19S, Rng 34E, NMPM
Latitude: 32.618700 Longitude: -103.515985
Lea County, New Mexico



Cement Plug: 10 sx 60' - 0'

Formation: Red Beds

Surface: 8.625" 24# @ 610' (Borehole 12.25")
Cement: 320 Sacks Class C from 610' to 0' (Circulated)

Formation: Anhydrite Mix

Mud Between Plugs

Cement Plug: 75 sx 1950' - 1500'

Formation: Salt (Top ~1500')

Formation: Seven Rivers (Top 3960')

Cement Plug: 100 sx 3900' - 3300'

Perforations: 3960' - 3970'

CIBP @ 4060'

Perforations: 4090' - 4100'

Cement Plug: 3 sx 4500' - 4482'
CIBP @ 4500'

Formation: Queen (Top 4530')
Perforations: 4533' - 4675'
Cement Plug: 3 sx 4800' - 4782'

CIBP @ 4800'
Perforations: 4888' - 5050'

PKR w/ bull plug abandoned @ 5200'

Perforations: 5232' - 5240'

Production: 5.5" 17# @ 5296' (Borehole 7.875")
Cement: 1500 Sacks Class C POZ from 5296' to 3300' (by Calc.)

SOS Consulting, LLC

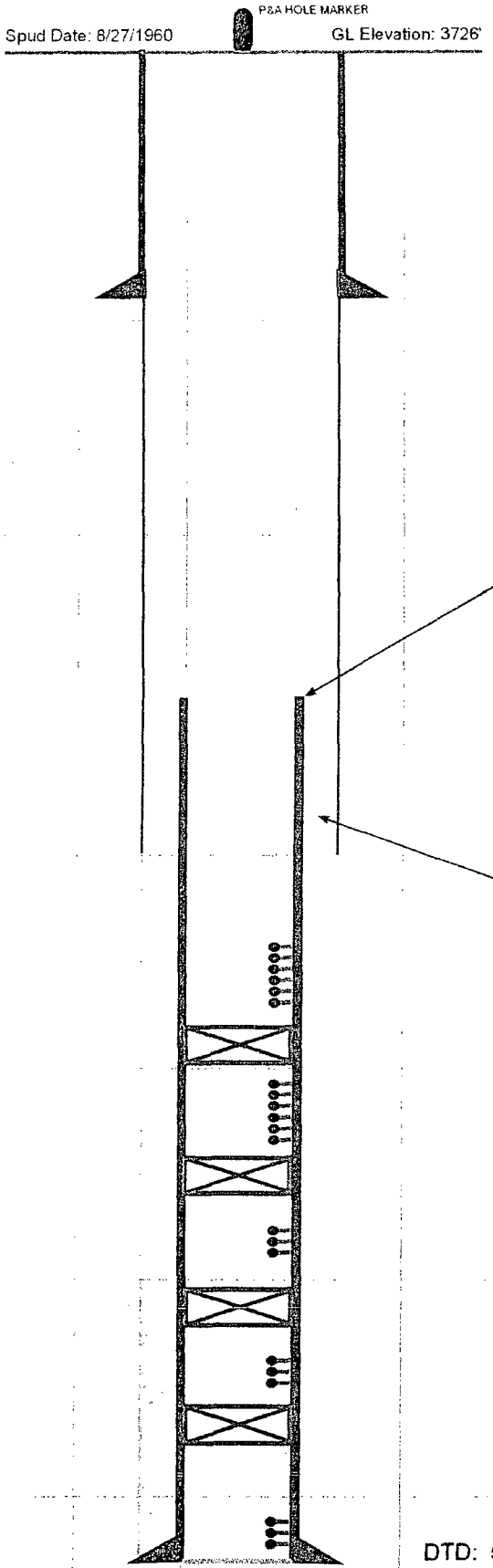
Pre-ONGARD Operator

Gulf 'C' State No. 2

API No. 30-025-02403
Location: 660' FNL & 1980' FWL
Section 36, Twp 19S, Rng 34E, NMPM
Latitude: 32.622328 Longitude: -103.515987
Lea County, New Mexico

CURRENT WELL CONFIGURATION

Plugged and Abandoned 11/03/1961



Cement Plug: 10 sx 40' - 0'

Formation: Red Beds

Cement Plug: 20 sx 129' - 40'

Surface: 8.625" 26# @ 129' (Borehole 9.0")
Cement: 90 Sacks Class C from 129' to 0' (Circulated)

Formation: Rustler (Top 1815')

Cement Plug: 20 sx 1950' - 1850'

5.5" Casing shot off at 2150'.

Cement Plug: 25 sx 2150' - 2025'

Formation: Tansill (Top 3324')

Formation: Yates (Top 3530')

Hole filled with mud prior to pumping plugs.

Cement Plug: 25 sx 3901' - 3600'

Perforations: 3650' - 3700'
Set plug @ 3901'

Perforations: 3910' - 3984'
Formation: Seven Rivers (Top 4082')

Set plug @ 4162'

Perforations: 4562' - 4568'

Set plug @ 4602'

Perforations: 4616' - 4660'

Formation: Queen (Top 4654')

Set plug @ 4800'

Production: 5.5" 17# @ 3665' (Borehole 7.875")
Cement: 355 Sacks Class C from 5050' to 3616' (by CALC.
Perforations: 5020' - 5034'

SOS Consulting, LLC

Pre-ONGARD Operator

CURRENT WELL CONFIGURATION

Plugged and Abandoned 3/27/1980

Lea 'DS' State No. 2

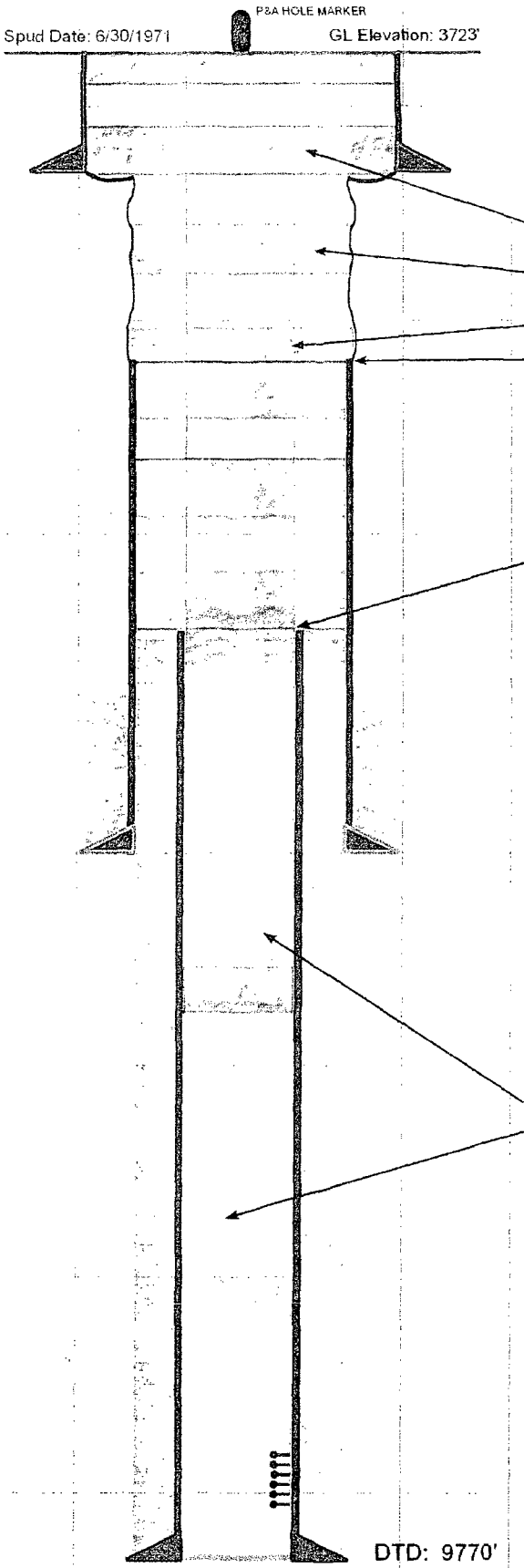
API No. 30-025-23808

Location: 770' FNL & 560' FWL

Section 36, Twp 19S, Rng 34E, NMPM

Latitude: 32.622014 Longitude: -103.520621

Lea County, New Mexico



Cement Plug: 10 sx 30' - 0'

Formation: Red Beds

Surface: 13.625" 48# @ 355' (Borehole 17.5")
Cement: 420 Sacks Class C from 355' to 0' (Circulated)

Cement Plug: 55 sx 300' - 270'

Cement Plug: 80 sx 400' - 367'

Cement Plug: 70 sx 1400' - 940'

Shot-off 8.625" @ 990'

Formation: Anhydrite Mix (Top ~1815')

Cement Plug: 35 sx 1950' - 1850'

Shot-off 5.5" @ 2327'

Cement Plug: 2358' - 2210'

Formation: Salt (Top ~3350')

Intermediate: 8.625" 24 & 32# @ 4049' (Borehole 11.0")
Cement: 265 Sacks Class C from 4049' to 3210'

Formation: Queen (Top ~5045')

Cement Plug: 20 sx 5400' - 5300'

Mud Between Plugs

Formation: 1st Bone Spring (Top 8780')

Cement Plug: 10 sx 9350' - 9300'

Formation: 2nd Bone Spring (Top 9504')

Perforations: 9692' - 9706'

Production: 5.5" 17# @ 9770' (Borehole 7.875")
Cement: 585 Sacks Class C from 9770' to 2360' (by Calc.)

SOS Consulting, LLC

C-108 Supporting Data

The Government 'E' No.1 SWD recently underwent extensive work-over and repair operations which are summarized below. OCD site visits and actual expenditures are in tables that follow.

First Repair Attempt

January 22, 2008 through February 26, 2008

Upon identifying the well failure, the subject well was shut in on 1/22/08. The well was bled down for several days to get on the hole. Approximately 4500 bbls of water were trucked for disposal. On 1/28/08, the operator was able to get in the hole – pulled 309 joints 2-3/8" tubing and ran in hole with 8 joints of 2-7/8" work string and scraper and shut in well. On 1/29/08 the job was shut down due to high wind. On 1/30/08, the well pressured back up to about 50 psi and approximately 400 bbls was flowed to the tanks for disposal. The unit crew was able to run in the hole with a scraper on work string. The next two days consisted of several runs with bit & scraper and gauge ring and then a routine plug & packer job was conducted to locate the depth of the casing failure. A length of bad casing was located between 5332' and 4168'. Set bridge plug and cement retainer. On 2/5/08 a squeeze job was performed between the 5-1/2" and 8-5/8" Initially pumped 20 bbls down at 100 psi to get a rate - established maximum rate of 4 bpm @ 600 psi. Pumped 260 sacks of class 'C' Neat followed by 500 sacks of class 'C' with 6% gel. Pulled out of the cement retainer and finished pumping and shut the well in with 600 psi. Drilled out and tested again for the next several days. Additional testing with plug and packer identified remaining hole between 5049' and 5018'. On 2/11/08, a cement retainer was set at 4986' but when tested the following morning, it did not hold. The retainer was drilled out and pulled the pipe out of the hole. Ran the packer in and set it to isolate the hole. On 2/13/08 a new retainer was run in the hole but would not set. The retainer was pulled and found severely damaged. Ran a new retainer in the hole and it was able to set. Hooked up to establish a rate but could only get 1 bpm @ 2500 psi. On 2/14/08 the crew ran back in the hole with bit and collars. The first retainer was drilled out and the hole was circulated. Drilled out for the next few days and ran a mill to get through a hardened steel piece of a stinger. On 2/18/08, drilled with the bit again to try and get through the remaining pieces of junk. Finally drilled through and ran more pipe and tagged the plug at 5332'. Started drilling and made several more feet with additional pieces of the retainer coming up. Circulated the hole and shut down. Over the next several days, the hole was cleaned out to a depth of 9743'. The hole was circulated with fresh water and shut in on 2/26/08 and the workover unit was rigged down.

OCD Site Visits During First Repair Attempt

Date	*OCD Inspector and Number of Visits*
1/26/08	Gary Wink – 1
1/29/08	Buddy Hill – 1
1/30/08	Buddy Hill – 2
1/31/08	Buddy Hill – 2
2/05/08*	Buddy Hill – 2
2/06/08	Mark Whitaker – 2
2/07/08	Mark Whitaker – 2
2/08/08*	Mark Whitaker – 1
2/18/08	Mark Whitaker – 2
2/19/08	Mark Whitaker – 2
2/20/08	Mark Whitaker – 2
2/21/08	Mark Whitaker – 2
2/22/08	Mark Whitaker – 2

* Went into OCD office to drop off C-103's and to discuss workover operations.

Final Repair – March – April, 2009

Consultant for workover – Al Perry, Hobbs, NM

Date	*Activity*
3/23/09	RU Black Warrior Wireline. Log well from 9536' to 9733'. Perforated 9716'-9732' w/ 32 holes. POOH guns. RIH and set composite bridge plug at 9650'.
3/26/09	RU Bull Rodgers casing crew. RIH w/ 4.0" float shoe & collar, follow w/ 137 jnts. 4.0" casing, x-over sub 4.0 x 5.5" and landed @ 9597' with top of liner @ 3843'. Ran 20 jts. 3.5" drill collar & 2.875" tubing. RD casing crew and shut in over night.
3/27/09	RU BJ Services and circulated liner at 2bpm @1300 psi for 30 mins. Ball seat sheared @ 3000 psi. Hanger set. PU 3' check liner weight w/ 52,000 # loss. Repressure ball seat, liner held. Push ball thru & circulated thru float 1.5bpm @ 700 psi. Pump down 240 sx 15.6 ppg slurry Class 'H' cement. Dropped plug & bumped w/ 4000 psi. Float held. Check liner top to 950 psi. Good test. RD BJ Services. Pulled tubing and collars 1000' above liner top. Shut down over night. ***Witnessed by Maxie Brown w/ OCD.***
3/28/09	POOH w/ tubing and collars.
3/30/09	Tally pipe & RU TFH Rental Tools. PU bit & 6 collars. Shut down due to high wind.
3/31/09	Continue in hole w/ tubing. Tag top of liner at 3820. Test to 500 psi. Good test. Start drilling & fell thru cement @ 3844'. Continued in hole w/ tubing and tagged up @ 9547'. Circulated hole clean. Shut down over night.
4/01/09	Resume drilling at 9547'. DO to 9597'. Pushed composite bridge plug to bottom. Lay down swivel and POOH w/ 56 jnts 2.875" TBG. Shut down over night.
4/02/09	POOH w/ remaining TBG and collars. Tally pipe and shut down.

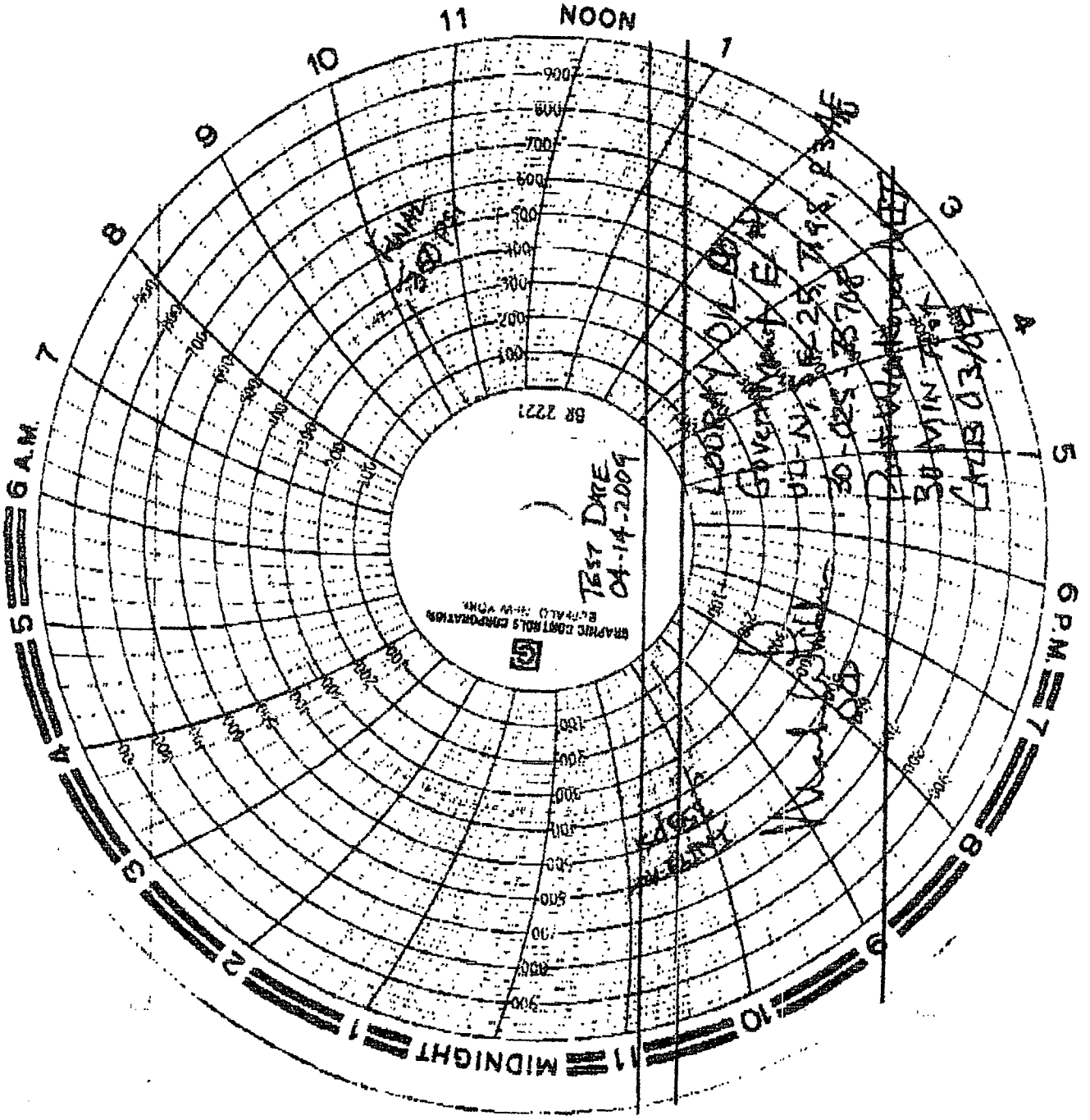
4/03/09	Trip in hole w/ 3.25" packer, 184 jnts 2.375" & 111 jnts.2.875" tbg. Tagged @ 9552'. POOH w/ TBG and packer. Shut down over night.
4/04/09	RIH w/ 3.625" bit & 6 x 3.125" collars & 6 jnts 2.375" TBG. Shut down due to high winds.
4/06/09	RIH w/ TBG & tagged @ 9552'. Drilled out to 9597' and circulated hole clean. Shut down over night.
4/07/09	PU swivel and circulated hole w/ 100 bbls 2% KCL. LD swivel. POOH w/ all TBG, collars & bit. Shut down over night.
4/08/09	Trip hole w/ packer & tubing. Packer would not set. POOH and shut down over night.
4/10/09	RIH w/ PKR & 184 jnts 2.375" TBG (6013.37') and 113 jnts 2.875" TBG (3565.65') RU pump truck and circulated hole clean. Set PKR @ 9596'. Tested casing. Shut down over night.
4/14/09	RU Maclasky Services and load CSG. Tested to 300 psi for 30 mins. w/ no bleed off. ***MIT witnessed by Mark Whitaker, OCD.*** RD pulling unit. Shut down. Well ready for injection. ***(MIT attached.)***

Costs Associated With Final Repair

Payee	*Item or service (if known)*	*Cost*
Weatherford	Liner hangers, collars; other	32,103.75
Louis Edgett	Additional tubulars	11,320.00
Lonnie Wilson Insurance	Insurance	4,531.77
TFH Rental Tools	Location pipe racks, etc.	34,197.38
Warrior Energy Services	Wireline bridge plug, etc.	11,663.67
Maclasky Oilfield Services	Acid job	9,066.03
Lea County Packer	Packer and run/set charge	12,031.23
Permian Pump and Supply	4.00" Liner (new); other	186,703.98
BJ Services	Cementing service	15,000.00
MICO Services	Pulling Unit and Oilfield service	61,719.88
Al Perry	Consulting services	9,000.00
SOS Consulting, LLC	Consulting services	3,344.97
G&L Trucking	Trucking	12,504.87
Barriga Tank Service	Tank setting and maintenance	6,000.00
First Insurance Funding	Insurance	1,214.40
BMB Rentals	Rental tools, matt boards	2,634.38
RMAA Oilfield Service	Gang truck	287.89
Miscellaneous service		13,514.65
Supplies (Office)		69.90
Postage, courier		168.45
TOTAL FOR WORKOVER AND REPAIR – APPROXIMATELY $432,000		

C-108 – Supporting Data

Successful Mechanical Integrity Test – 4/14/2009



C-108 ITEM XII – GEOLOGIC AFFIRMATION

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

Ben Stone, Partner
SOS Consulting, LLC

C-108 ITEM VII.4 – SOURCE AND ANALYSIS OF SUBJECT WATERS

Produced water will be gathered from area wells producing from the Queen (and other Delaware Group formations) and the Bone Spring formations. These waters will be disposed into the Bone Spring formation in the proposed SWD.

Water analyses from regional wells are attached and indicate that these waters are reasonably compatible.

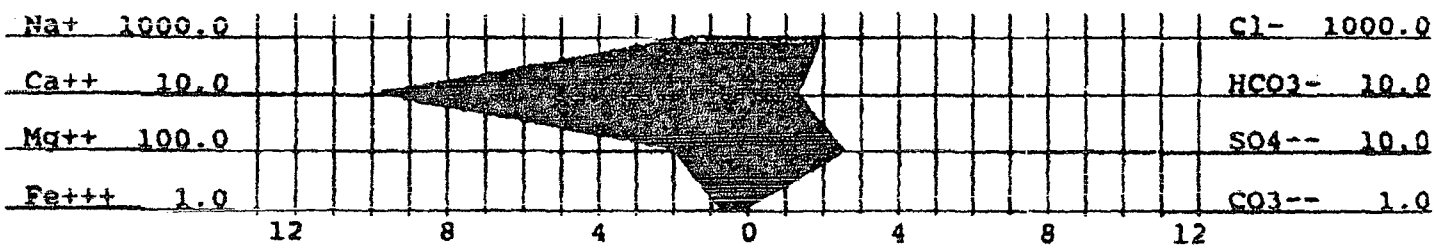
BAKER PERFORMANCE CHEMICALS
A Baker Hughes company

WATER ANALYSIS for ARMSTRONG ENERGY

Date of Analysis:	OCTOBER 12, 1992	**Analysis #:**	1757
Company:	ARMSTRONG ENERGY	**Company Address:**	N/D
State:	N/D	**Field:**	N/D
Lease:	GOVERNMENT E #1	**Well #:**	# 1
Oil (bbl/day):	N/D	**Water (bbl/day):**	N/D
Type of Water:	PRODUCED	**Temp.,C:**	17
Sample Source:	WELL HEAD	**Date of Sampling:**	OCTOBER 11, 1992
Representative:	DON BLACKSTOCK	**Analysis By:**	SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness :	300.00	
Calcium, (Ca++) :	100.00	2004.81
Magnesium, (Mg++):	200.00	2430.28
Iron, (Fe+++) :	0.81	15.00
Barium, (Ba++) :	N/D	N/D
Sodium, Na+(calc):	1767.38	40649.65
Manganese, (Mn++):	0.00	0.00
ANIONS		
Chloride, Cl- :	2028.17	71997.52
Sulfate, SO4-- :	26.01	1250.00
Carbonate, CO3-- :	0.00	0.00
Bicarbonate,HCO3-:	14.00	854.18
Hydroxyl,OH- :	0.00	0.00
Sulfide, S-- :	0.00	0.00
TOTAL SOLIDS (quant.):		119201.40

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	308.88	mg/l
Oxygen :	N/D	mg/l

PHYSICAL PROPERTIES

pH :	6.05
Spec Grav. :	1.100
TDS (calc.) :	119215.45

SCALE STABILITIES

Temp.,C	CaCO3	CaSO4	BaSO4
17.0	-0.48	5491	0
27.0	-0.31	5708	0
37.0	-0.10	6002	0
Max entity, (calc.)		1836	0

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

@20'C...CALCIUM SULFATE SCALING IS UNLIKELY.
@20'C...MODERATE CORROSIVE.

Champion Technologies, Inc.
P.O. BOX 2187
HOBBS, N.M. 88240
PHONE: (505) 393-7726

WATER ANALYSIS REPORT

Report for: Lowell Deckert
cc: Kenny Kearney
cc:
cc:
Company: Subsurface Water Disp. Inc.
Address: P.O. Box 1002
Service Engineer: K. Kearney

Date sampled: 04/29/94
Date reported: 05/01/94
Lease or well # : Lea Bone Springs
County: Lea State: N.M.
Formation:
Depth:
Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	160000	4513
Iron (Fe) (total)	3.0	
Total hardness	87000	
Calcium (Ca)	23458	1171
Magnesium (Mg)	6925	556
Bicarbonates (HCO3)	36	1
Carbonates (CO3)	0	
Sulfates (SO4)	548	11
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	64373	2799
Total dissolved solids	255342	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.182
Density (#/gal.)	9.850
pH	5.750
IONIC STRENGTH	5.39

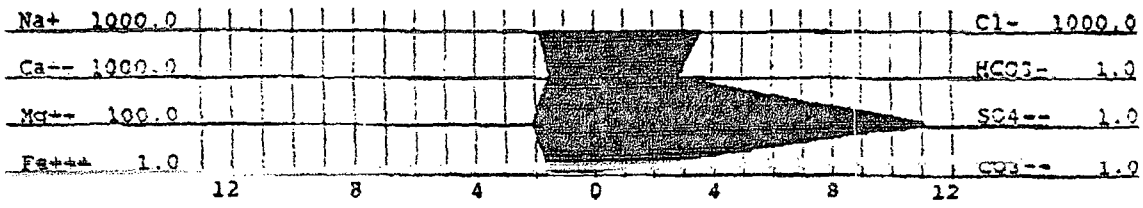
Stiff-Davis (CaCO3) Stability Index :
SI = pH - pCa - pAlk - K

SI @ 86 F = +0.41
104 F = +0.64
122 F = +0.90
140 F = +1.19
158 F = +1.51

This water is 90 mg/l (-10.38%) under ITS CALCULATED CaSO4 saturation value at 82 F.
SATURATION= 867 mg/L PRESENT= 777 mg/L

REPORTED BY ROBERT C MIDDLETON
TECHNICAL SERVICES REPRESEN

WATER ANALYSIS PATTERN



DISSOLVED SOLIDS

		mg/l	mg/l
Total Hardness	:	1820.00	
Calcium, (Ca++)	:	1600.00	32076.98
Magnesium, (Mg++)	:	220.00	2673.31
Iron, (Fe+++)	:	1.61	30.00
Barium, (Ba++)	:	N/D	N/D
Sodium, Na+(calc)	:	1939.31	44604.19
Manganese, (Mn++)	:	0.00	0.00
ANIONS			
Chloride, Cl-	:	3746.48	132995.38
Sulfate, SO4--	:	11.45	550.00
Carbonate, CO3--	:	0.00	0.00
Bicarbonate, HCO3-	:	3.00	183.04
Hydroxyl, OH-	:	0.00	0.00
Sulfide, S=	:	0.00	0.00
TOTAL SOLIDS (quant.)	:		213112.90

DISSOLVED GASES

Hydrogen sulfide	: 0.00	mg/l
Carbon dioxide	: 217.80	mg/l
Oxygen	: N/D	mg/l

PHYSICAL PROPERTIES

pH	: 6.65	
Spec Grav.	: 1.140	
TDS (calc.)	: 213115.89	

SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
16.0	1.73	513	2
26.0	N/D	570	1
36.0	N/D	660	0

Mass entity, (calc.) 833

RESIDUAL HYDROCARBONS: N/D

N/D = not determined

@16'C...CALCIUM SULFATE SCALING IS UNLIKELY .
@16'C...SEVERE CARBONATE SCALING.

RESISTIVITY: 0.057 @ 70°

ARMSTRONG ENERGY CORP.

WATER ANALYSIS
NORTHEAST LEA FIELD Delaware
LEA COUNTY, NEW MEXICO

EXHIBIT F-1

Champion Technologies, Inc.

P.O.BOX 2187
OBBS, N.M. 88240

PHONE: (505) 393-7726

WATER ANALYSIS REPORT

Report for: Lowell Deckert
cc: Kenny Kearney
cc:
cc:
Company: Subsurface Water Disp. Inc.
Address: P.O. Box 1002
Service Engineer: K. Kearney

Date sampled: 04/29/94
Date reported: 05/01/94
Lease or well # : West Pearl Queen
County: Lea State: N.M.
Formation:
Depth:
Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	110000	3103
Iron (Fe) (total)	1.0	
Total hardness	47000	
Calcium (Ca)	10827	540
Magnesium (Mg)	4860	390
Bicarbonates (HCO3)	158	3
Carbonates (CO3)	0	
Sulfates (SO4)	1757	37
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	50869	2212
Total dissolved solids	178473	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.127
Density (#/gal.)	9.392
pH	6.150
IONIC STRENGTH	3.63

Stiff-Davis (CaCO3) Stability Index :
SI = pH - pCa - pAlk - K

SI @ 86 F = +0.25
104 F = +0.48
122 F = +0.74
140 F = +1.03
158 F = +1.35

This water is 512 mg/l (25.87%) over ITS CALCULATED CaSO4 saturation value at 82 F.
SATURATION= 1979 mg/L PRESENT= 2491 mg/L

REPORTED BY ROBERT C MIDDLETON
TECHNICAL SERVICES REPRESENTATIVE

Champion Technologies, Inc.

P.O.BOX 2187
OBBS, N.M. 88240

PHONE: (505) 393-7726

WATER ANALYSIS REPORT

Report for: Lowell Deckert
cc: Kenny Kearney
cc:
cc:
Company: Subsurface Water Disp. Inc.
Address: P.O. Box 1002
Service Engineer: K. Kearney

Date sampled: 04/29/94
Date reported: 05/01/94
Lease or well # : Quail Greyburg
County: Lea State: N.M.
Formation:
Depth:
Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	180000	5078
Iron (Fe) (total)	2.0	
Total hardness	71000	
Calcium (Ca)	22055	1101
Magnesium (Mg)	3888	312
Bicarbonates (HCO3)	62	1
Carbonates (CO3)	0	
Sulfates (SO4)	573	12
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	84592	3678
Total dissolved solids	291176	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.207
Density (#/gal.)	10.059
pH	5.950
IONIC STRENGTH	5.80

Stiff-Davis (CaCO3) Stability Index :
SI = pH - pCa - pAlk - K

SI @ 86 F = +1.09
104 F = +1.32
122 F = +1.58
140 F = +1.82
158 F = +2.19

This water is 207 mg/l (-20.29%) under ITS CALCULATED CaSO4 saturation value at 82 F.
SATURATION= 1020 mg/L PRESENT= 813 mg/L

REPORTED BY ROBERT C MIDDLETON
TECHNICAL SERVICES REPRESENTATIVE

Champion Technologies, Inc.

P.O.BOX 2187
OBBS, N.M. 88240

PHONE: (505) 393-7726

WATER ANALYSIS REPORT

Report for: Lowell Deckert
cc: Kenny Kearney
cc:
cc:
Company: Subsurface Water Disp. Inc.
Address: P.O. Box 1002
Service Engineer: K. Kearney

Date sampled: 04/29/94
Date reported: 05/01/94
Lease or well # : W. Tonto B. Springs
County: Lea State: N.M.
Formation:
Depth:
Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	110000	3103
Iron (Fe) (total)	6.0	
Total hardness	8400	
Calcium (Ca)	2887	144
Magnesium (Mg)	291	23
Bicarbonates (HCO3)	329	5
Carbonates (CO3)	0	
Sulfates (SO4)	377	8
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	67820	2949
Total dissolved solids	181706	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.129
Density (#/gal.)	9.409
pH	6.200
IONIC STRENGTH	3.20

Stiff-Davis (CaCO3) Stability Index
SI = pH - pCa - pAlk - K

SI @ 86 F = -0.11
104 F = +0.12
122 F = +0.38
140 F = +0.67
158 F = +0.99

This water is 3672 mg/l (-87.30%) under ITS CALCULATED CaSO4 saturation value at 82 F.
SATURATION= 4206 mg/L PRESENT= 534 mg/L

REPORTED BY ROBERT C MIDDLETON
TECHNICAL SERVICES REPRESENTATIVE

C-108 ITEM XIII – PROOF OF NOTIFICATION
INTERESTED PARTIES LIST

SURFACE OWNER

U.S. DEPARTMENT OF INTERIOR
Bureau of Land Management
Oil & Gas Division
2909 W. Second Street
Roswell, NM 88201-2019

SWD RIGHT-OF-WAY HOLDER

AGUA SUCIA, LLC
1009 W. Broadway
Hobbs, NM 88241

OFFSET MINERALS LESSEES

ARMSTRONG ENERGY CORP.
P.O. Box 1973
Roswell, NM 88202

COG OPERATING, LLC
500 W. Texas, Ste.1300
Midland, TX 79701

MERIT ENERGY COMPANY
13727 Noel Road, Suite 500
Dallas, TX 75240

TRILOGY OPERATING INC.
P.O. Box 7606
Midland, TX 79708

REGULATORY

NEW MEXICO OIL CONSERVATION DIVISION
1625 N. French Dr.
Hobbs, NM 88240

U.S. DEPARTMENT OF INTERIOR
Bureau of Land Management
Oil & Gas Division
620 E. Greene St.
Carlsbad, NM 88220

SOS Consulting, LLC

August 28, 2009

Mr. Robert Armstrong
Armstrong Energy Corporation
P.O. Box 1973
Roswell, New Mexico 88202

Subject: Application of Agua Sucia, LLC to reinstate a permit for salt water disposal for its Government 'E' Well No.1 located in Unit Letter 'N', Section 25, Township 19-S, Range 34-E, Lea County, New Mexico.

Dear Mr. Armstrong:

Agua Sucia, LLC, 14605 Memorial Drive, Bixby, OK 74008 has filed an Application for Authority to Inject (C-108) with the New Mexico Oil Conservation Division for reinstatement of OCD Order SWD-559. Produced water from Queen (and other Delaware Group producing formations) and the Bone Spring formation will be disposed into the Bone Spring formation through perforations from 9,716 to 10,236 feet at a maximum injection pressure of 1943 psi at a maximum rate limited only by this pressure.

Immediately prior to Agua Sucia's purchase of the SWD facility, the newly repaired well had over 5700 feet of new 4-inch flush joint casing installed as well as nearly 9600 feet of new plastic-coated injection tubing and packer. The well passed an OCD witnessed, post-repair mechanical integrity test in April of this year. Buddy Hill, the supervisor of the Hobbs OCD district office confirmed to me in a telephone conversation that "We've had lots of issues with [the previous operator]" and that, "...the well is technically sound and ready for injection". (L. Hill, 5/19/2009). The repair operation was at considerable expense and will allow the salt water disposal well to operate safely and effectively for years to come. Agua Sucia, LLC is committed to this outcome and to being a good neighbor.

I would implore you to please review the enclosed copy of Agua Sucia's C-108 application. If you require additional information, please don't hesitate to contact me or Denis Schoenhofer, the owner of Agua Sucia, LLC at the above address or by calling him at 918-366-7957.

Thank you for your attention in this matter.

Best regards,

Ben Stone, Partner

Cc: Application file
New Mexico Oil Conservation Division

P.O. Box 300 Como, Texas 75431 903-488-9850 Fax 866-400-7628 neostone@consultant.com

SOS Consulting, LLC

August 28, 2009

Subject: Application of Agua Sucia, LLC to reinstate a permit for salt water disposal for its Government 'E' Well No.1 located in Section 25, Twp 19-S, Rng 34-E, Lea County, New Mexico.

To Whom It May Concern:

Agua Sucia, LLC, 14605 Memorial Drive, Bixby, OK 74008 has made application for renewal of a previously operating salt water disposal well authorized by order number SWD-559. Agua Sucia has filed Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division for administrative approval for salt water disposal in its Government 'E' Well No.1. The well, API No.30-025-23708 is located 610 FSL & 1880 FWL in Section 25, Township 19 South, Range 34 East in Lea County, New Mexico. Produced water from the Bone Spring formation will be disposed into the Bone Spring formation from approximately 9,716 to 10,236 feet at a maximum injection pressure of 1943 psi at a maximum rate limited only by this pressure.

Additional information may be obtained from Agua Sucia, LLC at the above address, attention Denis Schoenhofer, or its agent, SOS Consulting, LLC, (903)488-9850. Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505 within 15 days of the date of this notice.

Thank you for your attention in this matter.

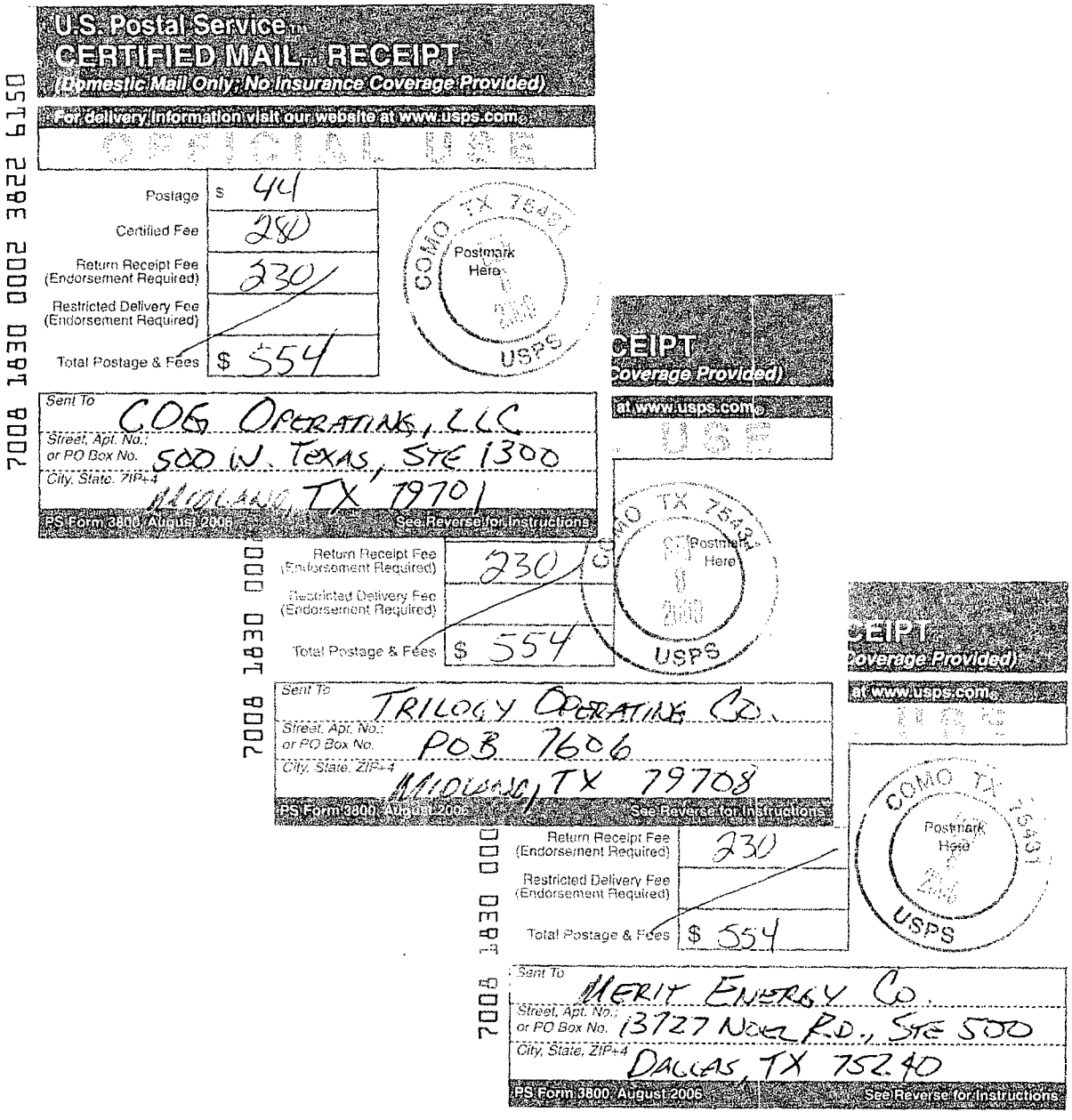
Sincerely,

Ben Stone, Partner

Cc: Application file
New Mexico Oil Conservation Division

P.O. Box 300 Como, Texas 75431 903-488-9850 Fax 866-400-7628 neostone@consultant.com

C-108 ITEM XIII – Proof of Notification
Certified Mailing to Interested Parties



U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

7008 1830 0002 3822 6150

Postage $ 44
Certified Fee 2.80
Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $ 5.54

COMO TX 75431 Postmark Here 08 2008 USPS

Sent To COG Operating, LLC
Street, Apt. No.; or PO Box No. 500 W. Texas, Ste 1300
City, State, ZIP+4 Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

7008 1830 0002 3822 6167

Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $ 5.54

COMO TX 75431 Postmark Here 08 2008 USPS

Sent To Trilogy Operating Co.
Street, Apt. No.; or PO Box No. POB 7606
City, State, ZIP+4 Midland, TX 79708

PS Form 3800, August 2006 See Reverse for Instructions

7008 1830 0002 3822 6174

Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $ 5.54

COMO TX 75431 Postmark Here 08 2008 USPS

Sent To Merit Energy Co.
Street, Apt. No.; or PO Box No. 13727 Noel Rd., Ste 500
City, State, ZIP+4 Dallas, TX 75240

PS Form 3800, August 2006 See Reverse for Instructions

C-108 ITEM XIII – Proof of Notification
FedEx'd Copies of Application to Parties with Particular Interest

1. NMOCD – Santa Fe, NM – Application package with all originals
2. Armstrong Energy Corporation – Roswell, NM
3. Bureau of Land Management – Carlsbad, NM
4. NMOCD – Hobbs District Office, Hobbs, NM
5. Agua Sucia, LLC – Bixby, OK
6. Lee Engineering – Midland, TX
7. James Bruce – Santa Fe, NM

https://www.fedex.com/shipping/html/en/PrintIFran

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Como, TX 75431

Ship Date: 08SEP09
ActWgt: 1.0 LB
CAD: 100120607/INET9060
Account#: S

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (505) 476-3448 BILL SENDER
Will Jones
NM Oil Conservation Division
1220 S SAINT FRANCIS DR

SANTA FE, NM 87505

WED - 08SEP A2

https://www.fedex.com/shipping/html/en/PrintIFran

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Como, TX 75431

Ship Date: 08SEP09
ActWgt: 0.5 LB
CAD: 100120607/INET9060
Account#: S

Delivery Address Bar Code

Ref # Agua Sucia
Invoice #
PO #
Dept #

SHIP TO: (575) 625-2222 BILL SENDER
Robert Armstrong
Armstrong Energy Corp.
500 N MAIN ST STE 200

ROSWELL, NM 88201

WED - 08SEP A2

TRK#

https://www.fedex.com/shipping/html/en/PrintIFrame.ht

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Como, TX 75431

Ship Date: 08SEP09
ActWgt: 1.0 LB
CAD: 100120607/INET9060
Account#: S

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (575) 234-5909 BILL SENDER
Jim Stovall
BLM - Carlsbad Office
620 E. Greene St.

Carlsbad, NM 88220

THU - 10SEP PM

TRK# 7969 2413 2381 ** 2DAY **

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Cerro, TX 75431

Ship Date: 08SEP09
ActWgt: 1.0 LB
CAD: 100120607/INET9060
Account#: S *********

Delivery Address Bar Code

SHIP TO: (575) 393-6161 X 102 BILL SENDER
Buddy Hill
NMOCD - Hobbs District Office
1625 N FRENCH DR

HOBBS, NM 88240

Ref # Agua Sucia GovE#1C-108
Invoice #
PO #
Dept #

THU - 10SEP A5

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Cerro, TX 75431

Ship Date: 08SEP09
ActWgt: 0.5 LB
CAD: 100120607/INET9060
Account#: S *********

Delivery Address Bar Code

SHIP TO: (918) 794-2018 BILL SENDER
Denis Schoenhofer
Agua Sucia
14605 S MEMORIAL DR

Ref # Agua Sucia GovE#1C-108
Invoice #
PO #
Dept #

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Cerro, TX 75431

Ship Date: 08SEP09
ActWgt: 0.5 LB
CAD: 100120607/INET9060
Account#: S *********

Delivery Address Bar Code

SHIP TO: (432) 682-1251 BILL SENDER
Robert Lee
Lee Engineering
219 N MAIN ST

MIDLAND, TX 79701

Ref # Agua Sucia GovE_No1_SWD
Invoice #
PO #
Dept #

From: Origin ID: SLRA (903) 488-9850
Benjamin Stone
SOS Consulting, LLC
1950 CR 2331

Cerro, TX 75431

Ship Date: 08SEP09
ActWgt: 1.0 LB
CAD: 100120607/INET9060
Account#: S *********

Delivery Address Bar Code

SHIP TO: (505) 982-2043 BILL SENDER
Jim Bruce
James Bruce, Esq.
369 MONTEZUMA AVE
BOX 213
SANTA FE, NM 87501

Ref # Agua Sucia GovE_No1_SWD
Invoice #
PO #
Dept #

THU - 10SEP A2

TRK# 0201 7979 1173 8989 ** 2DAY **

87501
NM-US
ABQ

SC SAFA