SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
	MWJ	23 April 03	SWD 1084	PCLP0711338723

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

RECEIVED
APR 23 2007
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

ABOVE THIS LINE FOR DIVISION USE ONLY

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

Rosetta's
Tsah Tah SWD #11

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
BRIAN WOOD	B. Wood	CONSULTANT	4-20-07

(505) 466-8120
FAX 466-9682

e-mail Address
brian@permitswest.com

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: _____Secondary Recovery _____Pressure Maintenance YES Disposal _____Storage
Application qualifies for administrative approval? XXX Yes _____No

II. OPERATOR: ROSETTA RESOURCES OPERATING LP

ADDRESS: 1200 17TH ST., SUITE 770, DENVER, CO 80202

CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: (505) 466-8120

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? XXX Yes _____No
If yes, give the Division order number authorizing the project: SWD-1063

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: BRIAN WOOD TITLE: CONSULTANT

SIGNATURE:  DATE: APR. 20, 2007

E-MAIL ADDRESS: brian@permitswest.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: _____

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

III. WELL DATA

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

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

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

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

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

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

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

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

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

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

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

(5) Give the depth to and 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

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.

Side 1

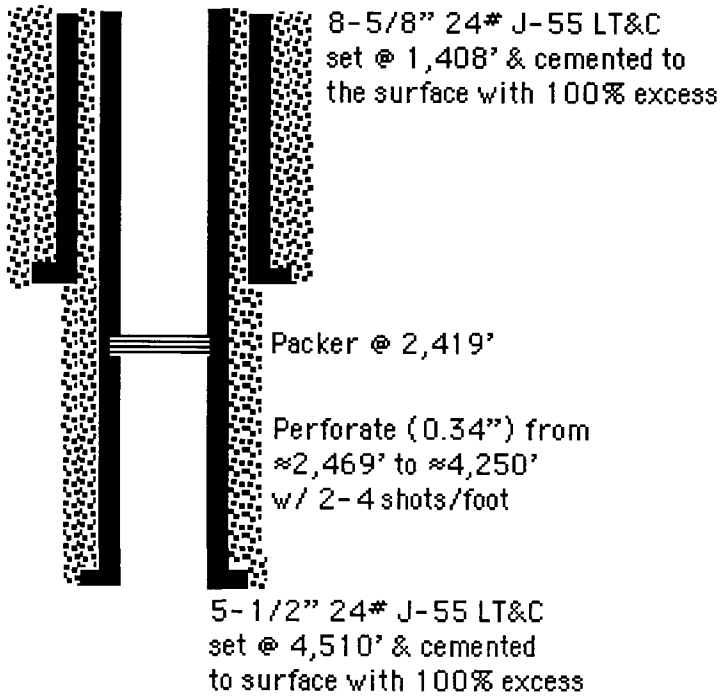
INJECTION WELL DATA SHEET

OPERATOR: ROSETTA RESOURCES OPERATING LP

WELL NAME & NUMBER: TSAH TAH SWD #11

WELL LOCATION:	970' FSL & 1510' FWL	N	11	24 N	10 W
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12-1/4" Casing Size: 8-5/8" 24# J-55 LT&C

Cemented with: 535 sacks *or* 979 ft^3

Top of Cement: SURFACE Method Determine: VISUAL

Intermediate Casing

Hole Size: Casing Size:

Cemented with: _____ sacks *or* _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2" 24# J-55 LT&C

Cemented with: 755 sacks *or* 1,348 ft^3

Top of Cement: SURFACE Method Determine: VISUAL

Total Depth: 4,510'

Changed 5/9/07 BY Ros

Injection Interval

From ~~≈2,469~~ 3197 feet To ≈4,250 feet

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" 6.5# J-55 Lining Material: PLASTIC

Type of Packer: 5-1/2" x 2-7/8" COMPRESSION SET WITH ON/OFF TOOL

Packer Setting Depth: WITHIN 50' OF THE HIGHEST PERFORATION

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

Additional Data

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

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

2. Name of the Injection Formation: ~~La VENTANA~~ & MENEFEE

3. Name of Field or Pool (if applicable): SWD; MESA VERDE

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. _____

   PERFORATED @ 4,181' IN POINT LOOKOUT. RBP SET @ 4,281'

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

   OVER: FRUITLAND (1,386') & PICTURED CLIFFS (1,636')

   UNDER: GALLUP (5,186') & DAKOTA (6,159')

ROSETTA RESOURCES OPERATING LP
TSAH TAH SWD #11
970' FSL & 1510' FWL
SEC. 11, T. 24 N., R. 10 W., SAN JUAN COUNTY, NM
La VENTANA & MENEFEE ZONES

I. Purpose is add 2 more zones for additional water disposal capacity.

II. Operator: Rosetta Resources Operating LP
Operator phone number: (720) 359-9144
Operator address: 1200 17th St., Suite 770
Denver, CO 80202
Contact: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease: BLM lease NMNM-112955
Lease Size: 1,761.69 acres
Lease Area: SW4NE4, S2NW4, S2, & Lots 2-4 Sec. 1
SE4NE4 & NE4SE4 Sec. 3
SW4 & N2 Sec. 11
all Sec. 12
all T. 24 N., R. 10 W.
Closest Lease Line: 970'
Well Name & Number: Tsah Tah SWD #11 (API # 30-045-34082)
Well Location: 970' FSL and 1510' FWL Sec. 11, T. 24 N., R. 10 W.
(see Exhibit A)

A. (2) Surface casing (8-5/8", 24#, J-55, L T & C) was set at ≈1,408' KB in a 12-1/4" hole. Circulated 60 barrels to the surface. Lead with 395 sacks (814 cubic feet) Type V + 2% SMS + 3 pounds per sack gilsonite + 1/4 pound per sack cellophane. Tailed with 140 sacks (165 cubic feet) Type V with 1% $CaCl_2$ + 1/4 pound per sack cellophane.

Production casing (5-1/2", 24#, J-55, L T & C) landed at ≈4,510' KB in a 7-7/8" hole. Float collar is at 4,496' KB. Marker joint is at 4,033'. DV tool is at 2,234' KB. Circulated 8 barrels to the surface. First stage was 345 sacks (652 cubic feet) of 65/35

Type V poz with 6% gel + 5 pounds per sack gilsonite + 1/8 pound per sack poly flake. Tailed with 100 sacks (146 cubic feet) of 50/50 poz with 2% gel + 10% Halad 9-2 + 10% CFR + 5 pounds per sack gilsonite. Second stage was 260 sacks (491 cubic feet) of 65/35 Type V poz with 6% gel + 5 pounds per sack gilsonite + 1/8 pound per sacks poly-flake. Tailed with 50 sacks (59 cubic feet) Type V Neat. Pressure tested casing to 2,500 psi.

A. (3) Tubing will be 2-7/8" 6.5# J-55 plastic lined injection string. It will be set at ≈2,419' KB (disposal interval will be ≈2,469' to ≈4,250').

A. (4) A 5-1/2" x 2-7/8" compression set packer with an on/off tool or its equivalent will be set within ≈50' of the highest perforation. Thus, packer will be set at ≈2,419' which will be ≈50' above the top perforation of ≈2,469'.

B. (1) Initial disposal zone was the Point Lookout sandstone. Rosetta plans to add the ~~La Ventana Tongue of the Cliff House and~~ the Menefee to the disposal interval. All ~~three~~ zones are in the Mesa Verde Formation (Pool 96160). Fracture gradient is expected to be a normal ≈0.433 psi per foot.

B. (2) For water sampling purposes, three zones have been perforated to date with two 0.34" shots per foot (2 shots per zone x 3 zones = total 6 shots). La Ventana was perforated at 2,469' KB. Menefee was perforated at 3,645' KB, and Point Lookout was perforated at 4,181' KB. Upon approval, additional similar perforations will be shot in the ~~La Ventana (2,469') through~~ Menefee Point Lookout (4,250') interval.

B. (3) Well has been drilled. It will be for Rosetta's exclusive use and for the sole purpose of water disposal from present and future Rosetta wells. Water analyses from three Rosetta Basin Fruitland coal gas wells within a three mile radius are attached.

B. (4) For water sampling purposes, three zones have been perforated to date with two 0.34" shots per foot (2 shots per zone x 3 zones =

total 6 shots). La Ventana was perforated at 2,469' KB. Menefee was perforated at 3,645' KB, and Point Lookout was perforated at 4,181' KB. Upon approval, additional similar perforations will be shot in the La Ventana (2,469') through Point Lookout (4,250') interval. Currently there is a retrievable bridge plug at 4,281' KB. There are no other perforations now in the well.

B. (5) Top of the La Ventana is at 2,450'. Highest La Ventana perforation is at 2,469'. Bottom of the closest overlying potentially productive zone (Pictured Cliffs) is at 1,838'. There will be a 631' interval between the bottom of the Pictured Cliffs and the highest injection perforation. Searches of NMOCD and Go-Tech web sites did not find any records of oil or gas production from the La Ventana or Cliff House.

Top of the Menefee is at 3,197'. Bottom of the Menefee is at 4,162'. Top of the closest underlying potentially productive zone (Gallup) is at ≈5,186'. There will be a ≈1,024' interval between the bottom of the Menefee and the top of the Gallup. Within this ≈1,024' interval is the Point Lookout zone which is currently being used for water disposal in this same well. Oil is being produced elsewhere in the San Juan Basin from the Menefee (≈37 miles south in 18-18n-10w at the Seven Lakes Menefee Field). Closest plugged Menefee well is 26 miles south in 30-20n-9w (wildcat with no production).

IV. This is not an expansion of an existing injection project. It is an expansion (2 more zones) of an existing water disposal project.

V. A map (Exhibit B) showing both existing wells (Rosetta's Tsah Tah 11 #3 and 1 stock watering well) within a half mile radius is attached. A map (Exhibit C) showing all 62 wells (32 P & A + 25 oil or gas producers + 5 water) within a two mile radius is attached. Details on the two wells within a half mile are:

OPERATOR	WELL USE	LOCATION	ZONE	TD	DISTANCE
Rosetta	gas well	SWSW Sec. 11	Fruitland	1,872'	382'
Lambert Yazzie	stock water	NWSE Sec. 11	Nacimiento ?*	? *	≈1/4 mile

*no records found in family, Federal, or Tribal offices

Exhibit D shows all leases (all BLM) within a half mile radius. Details are:

AREA	LESSOR	LEASE #	LESSEE(S)
E2 10-24n-10w	BLM	NMNM-104606	Coleman
W2 & NE4 11-24n-10w	BLM	NMNM-112955	Rosetta
SE4 11-24n-10w	BLM	NMNM-114376	Rosetta & Baseline
N2 14-24n-10w	BLM	NMNM-016760	Questar
NE4 15-24n-10w	BLM	NMNM-100807	Coleman

A map (Exhibit E) showing all lessors within a two mile radius is attached. Most leases are BLM. The remainder are Navajo allotted (FIMO) or State (NMSLO).

VI. Neither of the two wells which are within a 1/2 mile radius penetrate the proposed injection zones. The deepest (Rosetta's Tsah Tah 11 #3) of the two wells has a total depth of 1,872'. There will be a 597' interval between the bottom of that gas well and the highest proposed perforation (≈2,469').

VII. 1. Average injection rate will be ≈2,000 bwpd.
Maximum injection rate will be ≈3,000 bwpd.

2. System is closed. (Rosetta laid water pipelines with its gas pipelines). Facilities include a tank battery with skimmer and settling tanks, filters, meter, and an injection pump.

3. Average injection pressure will be ≈450 psi
Maximum injection pressure will be ≈490 psi (≤0.2 psi x depth of top perforation)

4. Water source will be existing and future Rosetta wells in the San Juan Basin. Rosetta had 32 approved wells in Townships 24 and 25 North, Range 10 West as of April 15, 2007. Seventeen of the 22 have been drilled. All gas wells are or will be Fruitland coal gas with a maximum

TD of 1,900'. The closest (382') is the Tsah Tah 11 #3.

Water analyses from the La Ventana Cliff House, Menefee, and Point Lookout (Exhibit F) in this well are attached. Three produced water analyses from the Basin Fruitland coal (Exhibit G) are also attached. A summary follows. All are Rosetta Tsah Tah wells.

Well:	2-4	33-2	34-4	SWD 11	SWD 11	SWD 11
Where:	2-24n-10w	33-25n-10w	34-25n-10w	11-24n-11w	11-24n-11w	11-24n-11w
What Zone:	Fruitland	Fruitland	Fruitland	La Ventana	Menefee	Pt. Lookout
Parameter						
Barium	2.44	3.19	2.26	No	Analysis	Run
Bicarbonate	518.5	786.9	549.0	486	725	483
Calcium	800	400	960	56	63	40
Chloride	19,000	18,000	16,000	9,552	14,653	13,465
Iron	27.62	46.22	21.77	0.10	0.16	0.46
Magnesium	344.04	245.22	149.33	48	77	77
pH	7.3	6.8	7.0	8.5	9.0	10.0
Sodium	10,906	10,980	9,166	6,240	9,586	8,752
Sulfate	zero	zero	2.0	23	32	97
TDS	31,599	30,462	26,851	16,443	25,149	22,953

5. Neither the La Ventana nor the Menefee have been found to be productive within two miles of the well. Searches of NMOCD and Go-Tech web sites did not find any records of oil or gas production from the La Ventana or Cliff House. Oil is being produced elsewhere in the San Juan Basin from the Menefee (≈37 miles south in 18-18n-10w at the Seven Lakes Menefee Field). Closest plugged Menefee well is 26 miles south in 30-20n-9w (wildcat with no production).

Stone et al in Hydrogeology and water resources of San Juan Basin, New Mexico wrote that the Cliff House in the deeper parts of the basin probably has a specific conductance exceeding 30,000 micro mhos. This would be considered very saline. Stone says fluoride concentrations in Menefee wells near the Chaco River exceed safe drinking water limits.

VIII. The La Ventana is a coastal marine sandstone of the Late Cretaceous. It is 747' thick in this well. Top is at 2,450'. Bottom is at 3,197'. Initial perforation is at 2,469'.

The Menefee Formation consists of Late Cretaceous claystone, coal, siltstone, shale, and sandstone. The Formation is ≈965' thick in this well. Top is at 3,197'. Bottom is at 4,162'. Initial perforation is at 3,645'.

Formation tops in this well are:

Nacimiento: 0'
Ojo Alamo Sandstone*: 886'
Kirtland Shale*: 961'
Fruitland Formation*: 1,386'
Pictured Cliffs Sandstone*: 1,636'
Lewis Shale: 1,838'
Cliff House Sandstone: 2,053'
La Ventana: 2,450'
Menefee: 3,197'
Point Lookout Sandstone: 4,162'
Mancos Shale: 4,350'
Plugged Back Total Depth: 4,496'
Total Depth: 4,510'

*estimated, remaining tops are actual KB depths

There is one water well within a one mile radius. It is a stock watering well ≈1/4 mile northeast in the NWSE Section 11. There are five water wells within a two mile radius. All five water wells are believed to be above the La Ventana. Likely aquifers are the Nacimiento and Ojo Alamo. From close to far, the five water wells are:

stock well ≈1/4 mile NE in NWSE Sec. 11
windmill ≈1.2 miles SW in NWNW Sec. 15
two Mission wells ≈1-3/4 miles NE in NENE Sec. 12
Dugan well ≈1.95 miles NE in NWNW Section 7

No existing underground drinking water sources are below the La Ventana or Menefee within a two mile radius. There will be ≈1,350' of vertical separation between the bottom of the deepest water well (Dugan) within ≈1.95 miles and the top of the La Ventana.

IX. The well will be stimulated with a sand-water fracture.

X. Depth correlation, spectral density, high resolution induction, and gamma ray/casing collar locator logs were run. Copies were provided to the NMOCD by Blue Jet.

XI. There is one water well within a one mile radius. Its depth is unknown. It is ≈1/4 mile northeast in the NWSE of Section 11. A water analysis is attached as Exhibit H. (The analysis was also hand delivered to the family which operates the well. The well is only used for stock watering. A Navajo Tribal Utility Authority water pipeline provides drinking water to the family.)

XII. Rosetta is not aware of any geologic or engineering data which may indicate the La Ventana or Menefee is in hydrologic connection with any underground sources of water. There will be ≈1,350' of vertical separation between the top (≈2,450') of the La Ventana and the bottom (1,100') of the deepest water well within ≈1.95 miles. This interval includes at least two shale zones (Lewis and the Menefee).

XIII. Notice (this application) has been sent (Exhibit I) to the surface owner (BLM), operators of all wells (Rosetta and Yazzie), and lessees or lease operating right holders (Baseline, Coleman, EOG, North American Petro Corp., Questar), and lessors (only BLM) within a half mile. A legal ad (see Exhibit J) was published on April 12, 2007.

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045- 34082	96160	SWD; MESA VERDE

[4] Property Code	[5] Property Name	[6] Well Number
	TSAH TAH SWD	11

[7] OGRID No.	[8] Operator Name	[9] Elevation
239235	ROSETTA RESOURCES OPERATING LP	6886'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	11	24N	10W		970'	SOUTH	1510'	WEST	SAN JUAN

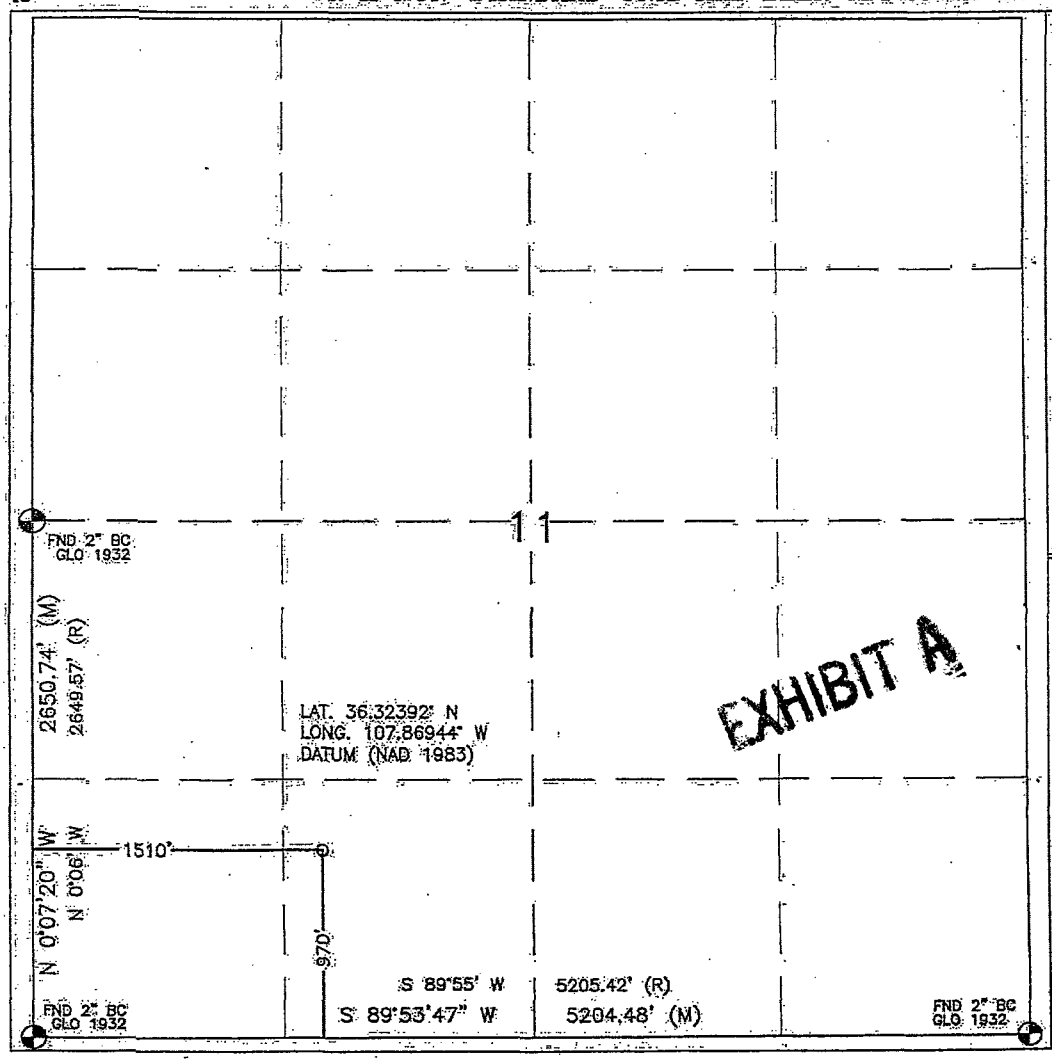
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

BRIAN WOOD
Printed Name

CONSULTANT
Title

NOV. 23, 2006
Date

18 SURVEYOR CERTIFICATION

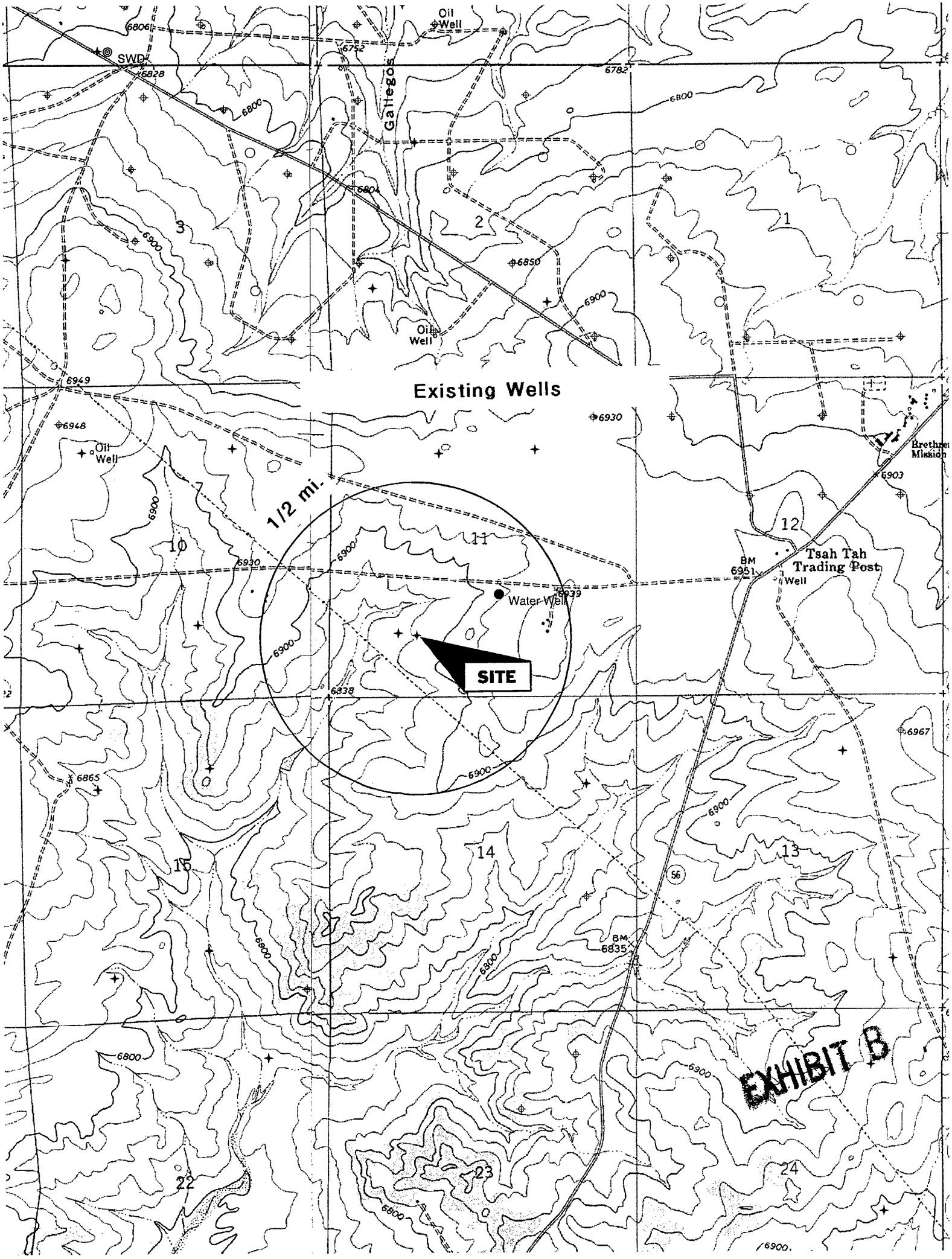
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

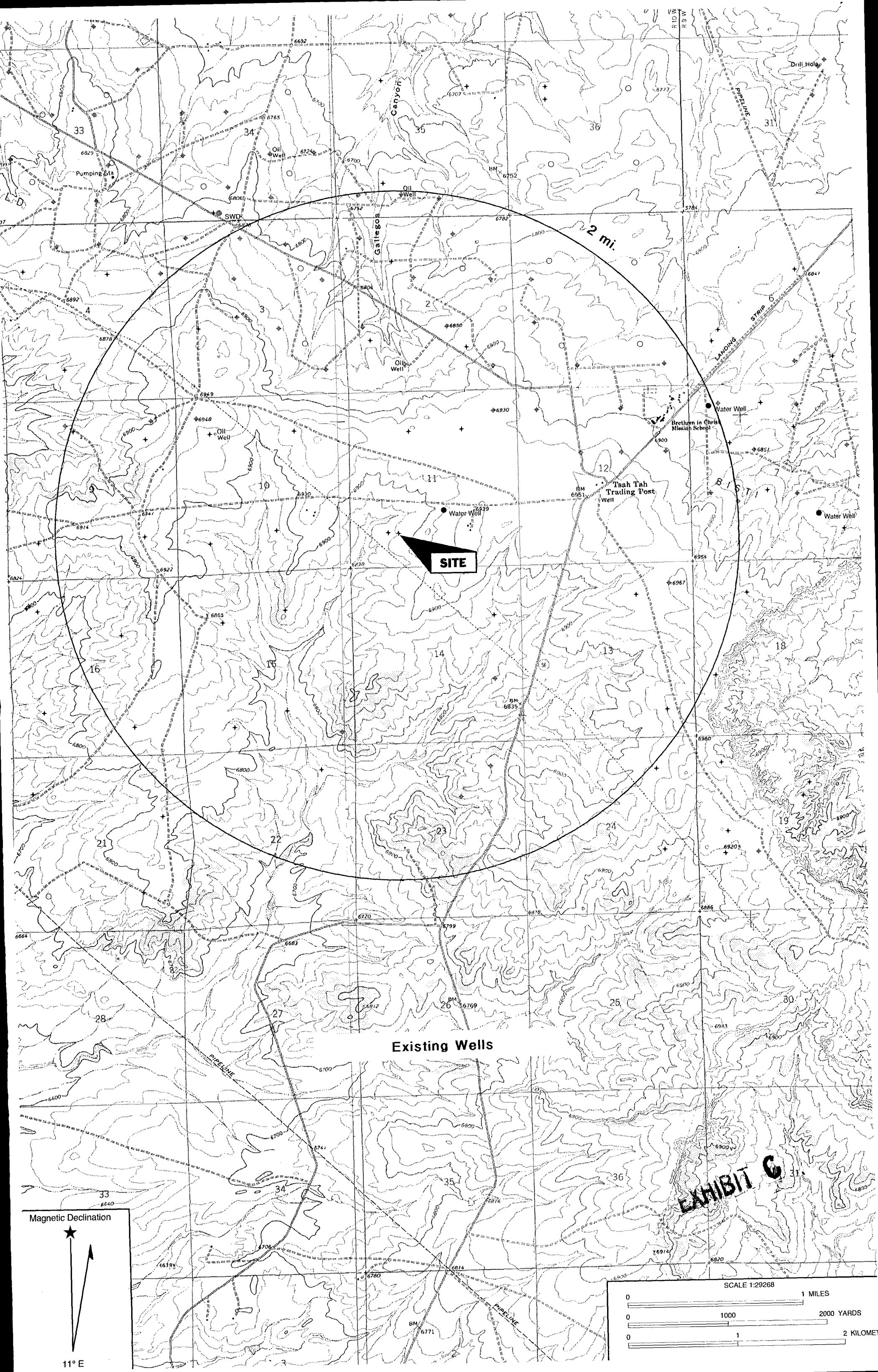
SEPTEMBER 23, 2006
Date of Survey

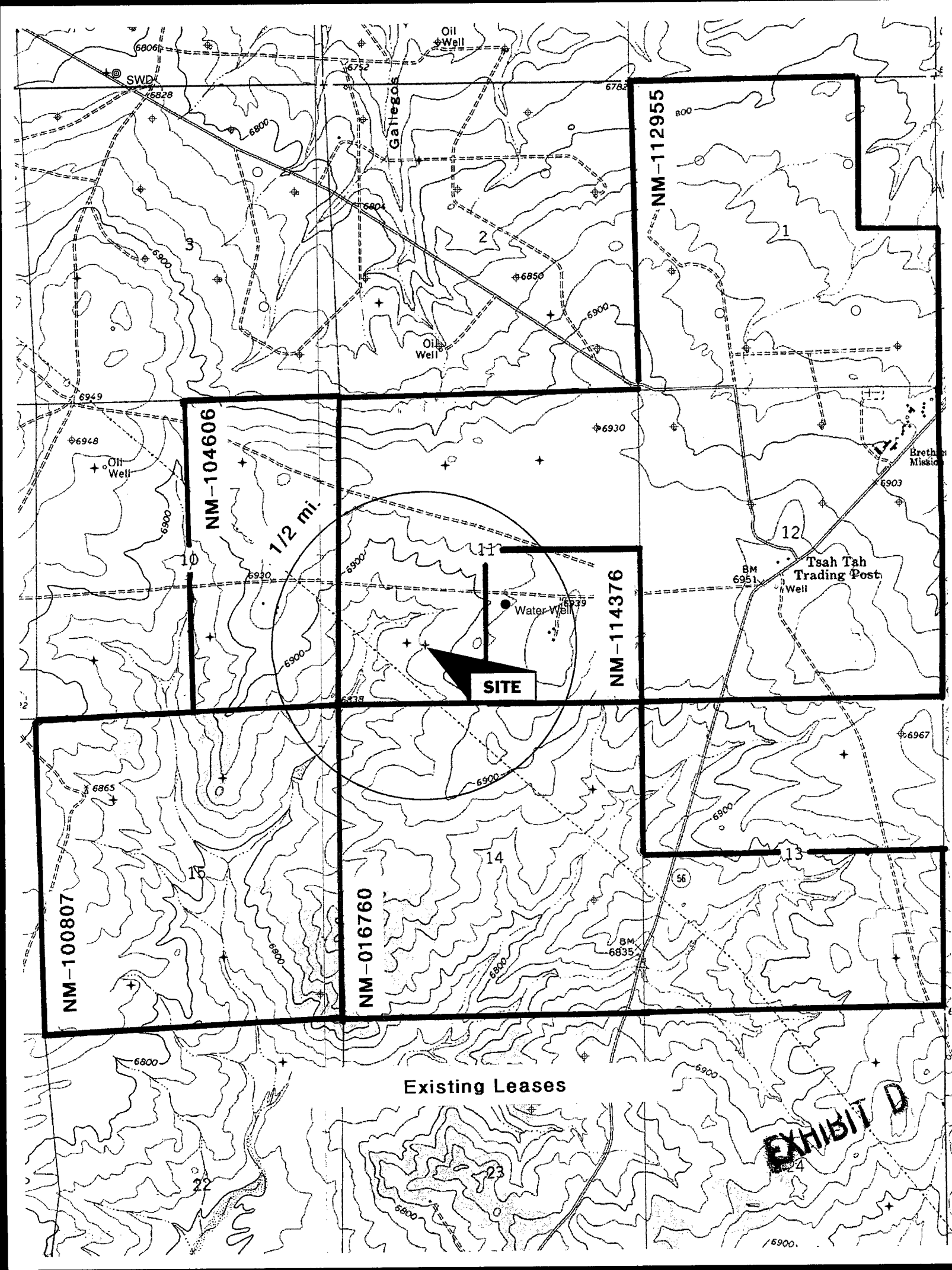
Signature and Seal of Professional Surveyor:

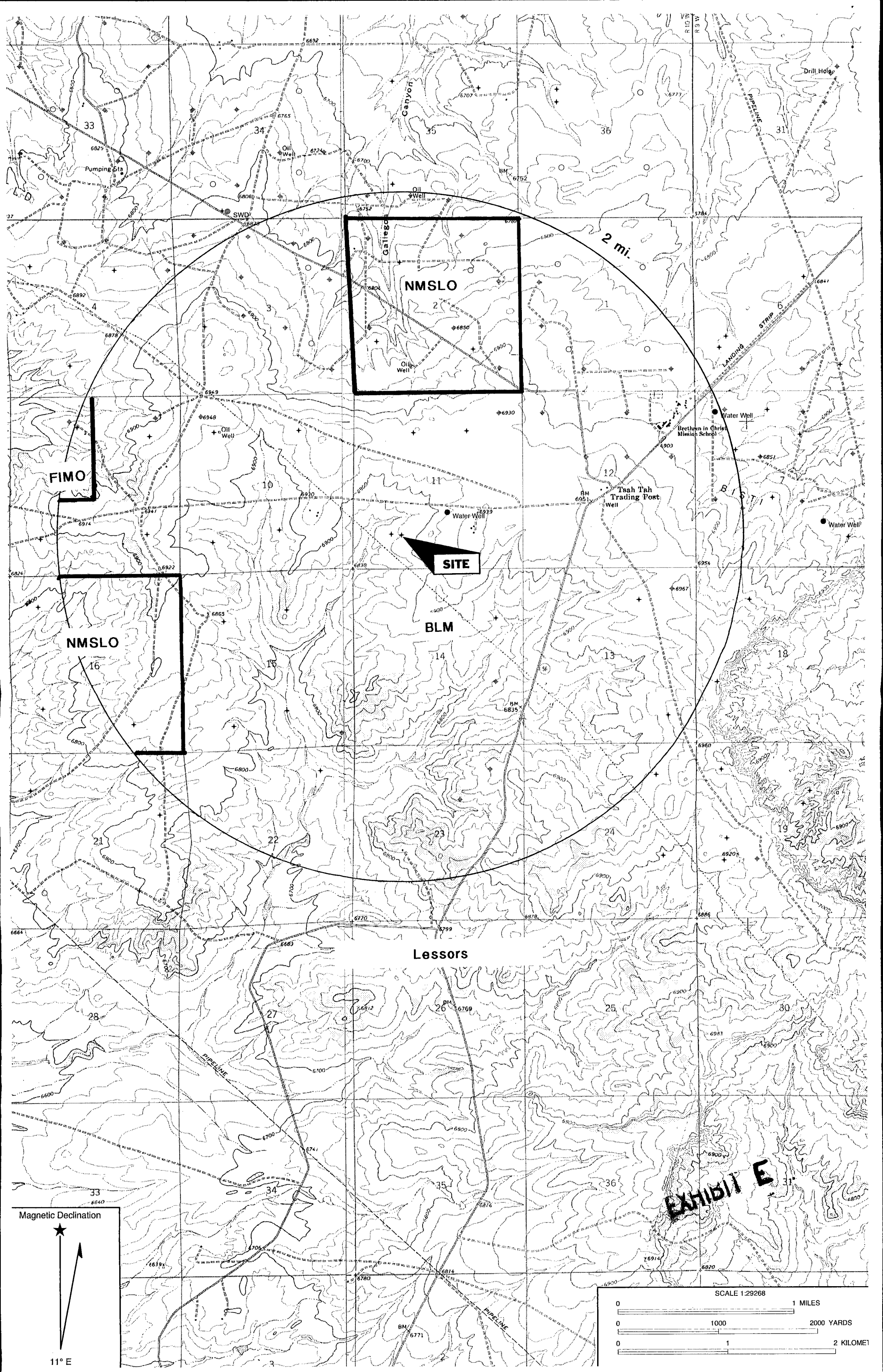
NEW MEXICO (10201) REGISTERED PROFESSIONAL LAND SURVEYOR

DAVID RUSSELL
Certificate Number 10201


Existing Wells
1/2 mi.
SITE
Water Well
Oil Well
SWD
Gallego
Tsah Tah Trading Post
Well
BM 6951
BM 6835
Brethren Mission
EXHIBIT B


2 mi.
SITE
Existing Wells
Gallegos Canyon
PIPELINE
LANDING STRIP
Drill Hole
Water Well
Oil Well
Pumping Sta
SWD
Brethren in Christ Mission School
Tsah Tah Trading Post
Magnetic Declination
11° E
SCALE 1:29268
1 MILES
2000 YARDS
2 KILOMET
EXHIBIT C


NM-112955
NM-104606
NM-114376
NM-100807
NM-016760
1/2 mi.
SITE
Water Well
Oil Well
Tsah Tah Trading Post
Gallegos
SWD
BM 6951
BM 6835
Existing Leases
EXHIBIT D


NMSLO
2 mi.
FIMO
SITE
NMSLO
BLM
Lessors
Drill Hole
Water Well
Water Well
Water Well
Oil Well
Oil Well
Oil Well
Oil Well
Pumping Sta
SWD
Tsah Tah Trading Post
Brethren in Christ Mission School
Gallegos Canyon
PIPELINE
PIPELINE
PIPELINE
LANDING STRIP
Magnetic Declination
11° E
SCALE 1:29268
0 1 MILES
0 1000 2000 YARDS
0 1 2 KILOMET
EXHIBIT E

Key Pressure Pumping Services
Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	CLIFFHOUSE	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	2469	Source:	Swab Run #1

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.005 @ 59 (°F)	S.G. (Corrected):	1.005
pH:	8.50 ?	MAGNESIUM:	48 ppm
RESISTIVITY:	0.70 ohm/meter	CALCIUM:	56 ppm
IRON:	0.10 ppm	BICARBONATES:	486 ppm
H2S:	0 ppm	CHLORIDES:	9552 ppm
POTASSIUM:	38 ppm	SODIUM :	6240 ppm
SULFATES:	23 ppm	TDS:	16443 ppm ≈ .45 Rw

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote

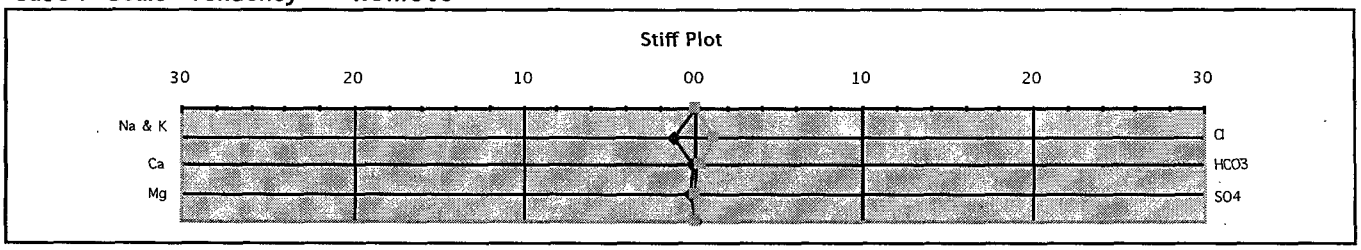


EXHIBIT F

Key Pressure Pumping Services
Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

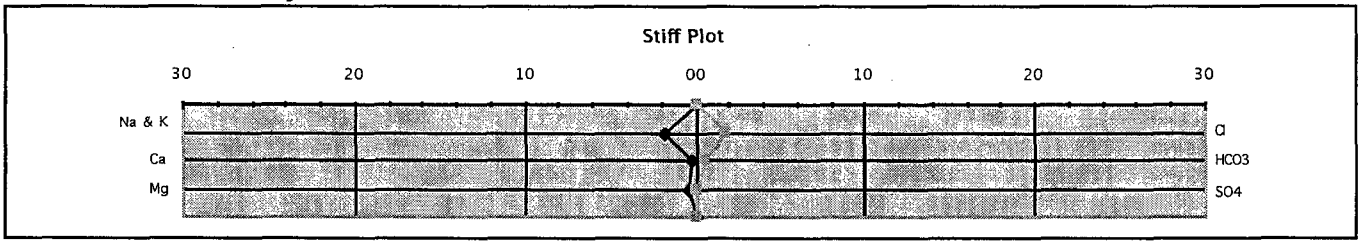
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	Menefee	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	3645	Source:	Swab Run #1

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY: 1.010 52 (°F) S.G. (Corrected): 1.010

pH:	9.00	MAGNESIUM:	77 ppm
RESISTIVITY:	0.80 ohm/meter	CALCIUM:	63 ppm
IRON:	0.16 ppm	BICARBONATES:	725 ppm
H2S:	0 ppm	CHLORIDES:	14653 ppm
POTASSIUM:	11 ppm	SODIUM :	9586 ppm
SULFATES:	32 ppm	TDS:	25149 ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote



Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

EXHIBIT 6

Key Pressure Pumping Services
Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

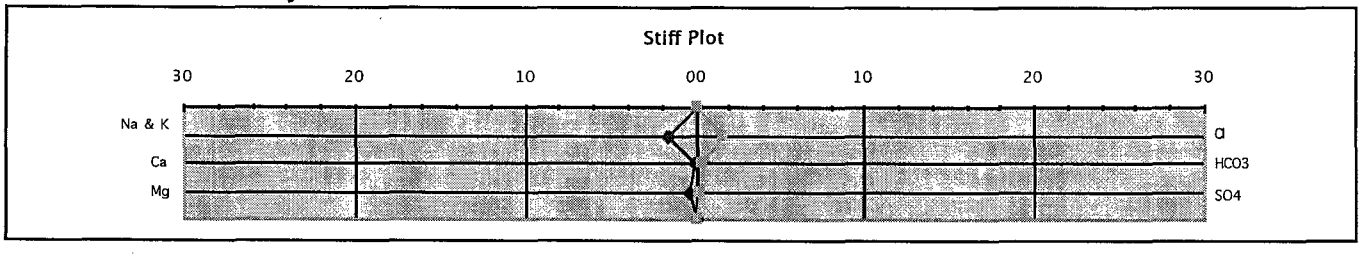
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	POINT LOOKOUT	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	4181	Source:	Swab Run #6

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY: 1.010 47 (°F) S.G. (Corrected): 1.010

pH:	10.00	MAGNESIUM:	77 ppm
RESISTIVITY:	0.40 ohm/meter	CALCIUM:	40 ppm
IRON:	0.46 ppm	BICARBONATES:	483 ppm
H2S:	0 ppm	CHLORIDES:	13465 ppm
POTASSIUM:	38 ppm	SODIUM :	8752 ppm
SULFATES:	97 ppm	TDS:	22953 ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote



Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

EXHIBIT F

Water Analysis

Analysis #: 1058

Company: Rosetta Resources

Lease: .

Location: Farmington, New Mexico

Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 2 #4

Sample Point: 2 #4

MULTI-CHEM PRODUCTION CHEMICALS

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	10,906.14	474.18
Calcium, Ca	800.00	39.80
Magnesium, Mg	344.04	28.20
Barium, Ba	2.44	0.04
Iron, Fe	27.62	1.48

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO3		
Bicarbonate, HCO3	518.50	8.49
Sulfate, SO4	0.00	0.00
Chloride, Cl	19,000.00	535.21
Sulfide, S		

OTHER PROPERTIES

pH	7.30
Specific Gravity	1.014
Dissolved Oxygen, (Mg/l)	
Dissolved Carbon Dioxide	19.80
Sulfide as H2S, (ppm)	0.00
Sample Temp	F. 72 C. 22
CO2 in Gas Phase (Mg/l)	
H2S in Gas Phase (Mg/l)	
Total Hardness (Me/l)	68.00

Total Dissolved Solids (Mg/l)	31,599
Total Ionic Strength	0.5784
Maximum CaSO4, (calc.)	0.00
Maximum BaSO4, (calc.)	0.00
Total SRB (colonies/cc)	
Total APB (colonies/cc)	
Total Aerobic (colonies/cc)	
Manganese (Mg/l):	0.84

Conclusion:

Calcium Carbonate scaling index is positive above 9 degrees Centigrade.
Calcium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.
Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

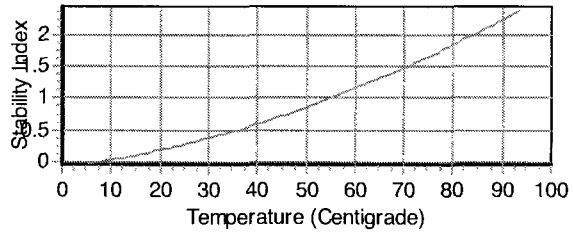
Remarks:

EXHIBIT G

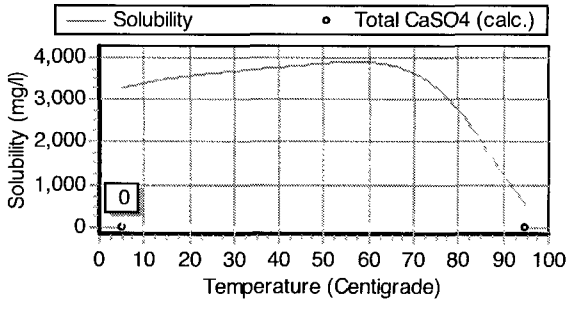
Fahrenheit Degrees 32 85 122 167 212
(C X 1.8) + 32
Centigrade Degrees 0 25 50 75 100

Scaling Indices vs. Temperature

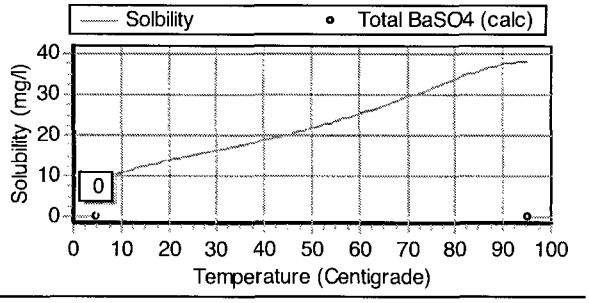
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis

Analysis #: 1059

Company: Rosetta Resources

Lease: .

Location: Farmington, New Mexico

Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 33 #2

Sample Point: 33 #2

MULTI-CHEM PRODUCTION CHEMICALS

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	10,979.97	477.39
Calcium, Ca	400.00	19.90
Magnesium, Mg	245.22	20.10
Barium, Ba	3.19	0.05
Iron, Fe	46.22	2.48

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO3		
Bicarbonate, HCO3	786.90	12.88
Sulfate, SO4	0.00	0.00
Chloride, Cl	18,000.00	507.04
Sulfide, S		

OTHER PROPERTIES

pH	6.80
Specific Gravity	1.014
Dissolved Oxygen, (Mg/l)	
Dissolved Carbon Dioxide	7.90
Sulfide as H2S, (ppm)	0.00
Sample Temp	F. 72 C. 22
CO2 in Gas Phase (Mg/l)	
H2S in Gas Phase (Mg/l)	
Total Hardness (Me/l)	40.00

Total Dissolved Solids (Mg/l)	30,462
Total Ionic Strength	0.5402
Maximum CaSO4, (calc.)	0.00
Maximum BaSO4, (calc.)	0.00
Total SRB (colonies/cc)	
Total APB (colonies/cc)	
Total Aerobic (colonies/cc)	
Manganese (Mg/l):	0.43

Conclusion:

Calcium Carbonate scaling index is positive above 41 degrees Centigrade.
Calcium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.
Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

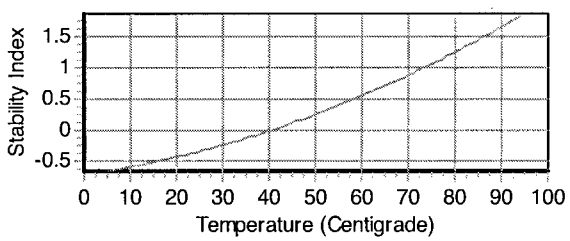
Remarks:

EXHIBIT 3

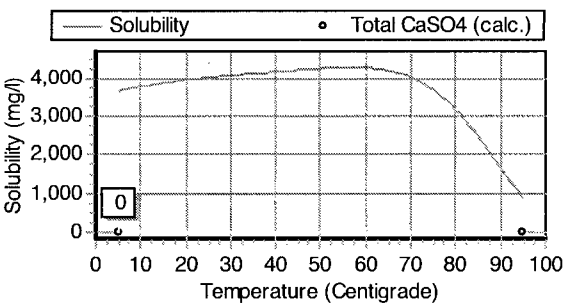
Fahrenheit Degrees 32 85 122 167 212
(C X 1.8) + 32
Centigrade Degrees 0 25 50 75 100

Scaling Indices vs. Temperature

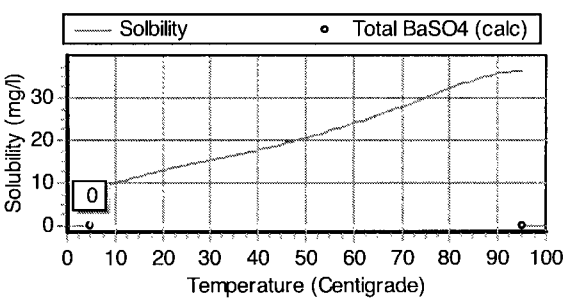
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis

Analysis #: 1060

Company: Rosetta Resources

Lease: .

Location: Farmington, New Mexico

Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 34 #4

Sample Point: 34 #4

MULTI-CHEM PRODUCTION CHEMICALS

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	9,166.19	398.53
Calcium, Ca	960.00	47.76
Magnesium, Mg	149.33	12.24
Barium, Ba	2.26	0.03
Iron, Fe	21.77	1.17

ANIONS	mg/l	meq/l
Hydroxyl, OH		
Carbonate, CO3		
Bicarbonate, HCO3	549.00	8.99
Sulfate, SO4	2.00	0.04
Chloride, Cl	16,000.00	450.70
Sulfide, S		

OTHER PROPERTIES

pH	7.00
Specific Gravity	1.014
Dissolved Oxygen, (Mg/l)	
Dissolved Carbon Dioxide	11.90
Sulfide as H2S, (ppm)	0.00
Sample Temp	F. 72 C. 22
CO2 in Gas Phase (Mg/l)	
H2S in Gas Phase (Mg/l)	
Total Hardness (Me/l)	60.00

Total Dissolved Solids (Mg/l)	26,851
Total Ionic Strength	0.4905
Maximum CaSO4, (calc.)	2.85
Maximum BaSO4, (calc.)	3.87
Total SRB (colonies/cc)	
Total APB (colonies/cc)	
Total Aerobic (colonies/cc)	
Manganese (Mg/l):	0.26

Conclusion:

Calcium Carbonate scaling index is positive above 19 degrees Centigrade.
Calcium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.
Barium Sulfate scale is indicated below 5 degrees Centigrade.

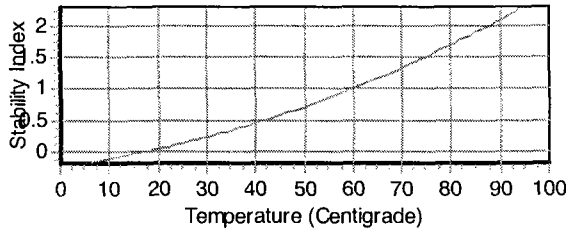
Remarks:

EXHIBIT G

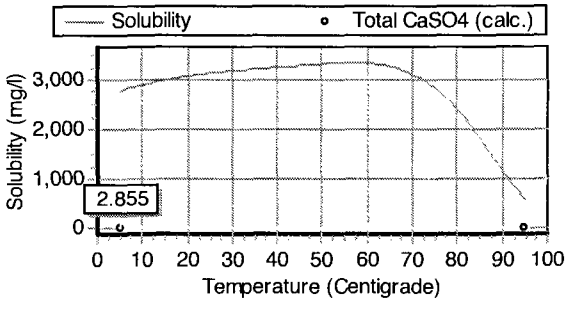
Fahrenheit Degrees 32 85 122 167 212
(C X 1.8) + 32
Centigrade Degrees 0 25 50 75 100

Scaling Indices vs. Temperature

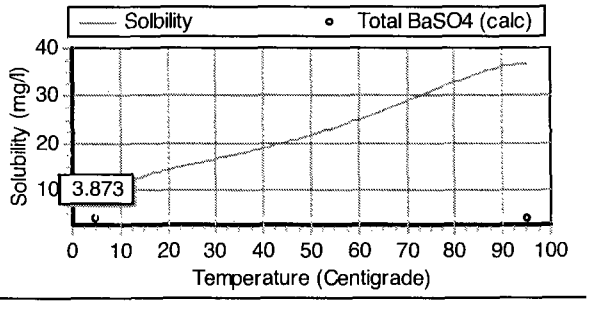
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



612 E. Murray Drive
Farmington, NM 87499

Off: (505) 327-1072
FAX: (505) 327-1496

iiná bá

P.O. Box 3788
Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *17-Nov-06*

CLIENT:	Permits West	**Client Sample Info:**	
Work Order:	0611009	**Client Sample ID:**	Section 11 NW to SE
Project:	Section 11	**Collection Date:**	11/8/2006 9:00:00 AM
Lab ID:	0611009-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		**SW6010B**				Analyst: **jle**
Iron	< 0.021	0.021		mg/L	1	11/9/2006 4:04:02 PM
Magnesium	2.64	0.010		mg/L	1	11/9/2006 4:04:02 PM
Calcium	16.8	0.490		mg/L	10	11/10/2006 10:31:04 AM
Sodium	98.0	0.800		mg/L	10	11/10/2006 10:31:04 AM
Potassium	1.43	0.040		mg/L	1	11/9/2006 4:04:02 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **elc**
Chloride	10.1	2.00		mg/L	20	11/15/2006
Sulfate	74.5	2.00		mg/L	20	11/15/2006
ALKALINITY, TOTAL		**M2320 B**				Analyst: **elc**
Alkalinity, Bicarbonate (As CaCO3)	169	5		mg/L CaCO3	1	11/8/2006
Alkalinity, Carbonate (As CaCO3)	ND	5		mg/L CaCO3	1	11/8/2006
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	11/8/2006
Alkalinity, Total (As CaCO3)	169	5		mg/L CaCO3	1	11/8/2006
HARDNESS, TOTAL		**M2340 B**				Analyst: **jem**
Hardness (As CaCO3)	53	1		mg/L	1	11/17/2006
PH		**E150.1**				Analyst: **elc**
pH	7.92	1.00		pH units	1	11/8/2006
Temperature	20.3	0		deg C	1	11/8/2006
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: **elc**
Resistivity	18.900	0.001		ohm-m	1	11/8/2006
SPECIFIC GRAVITY		**M2710 F**				Analyst: **elc**
Specific Gravity	1.001	0.001		Units	1	11/8/2006
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **elc**
Total Dissolved Solids (Residue, Filterable)	330	25		mg/L	1	11/13/2006
TOTAL DISSOLVED SOLIDS		**M1030F**				Analyst: **jem**
Total Dissolved Solids (Calculated)	305	5		mg/L	1	11/17/2006

EXHIBIT H

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID: MBLK_061115A	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	Run ID: IC-761_061115A
Client ID: ZZZZZ	Batch ID: R8698	TestNo: E300		Analysis Date: 11/15/2006	SeqNo: 121608

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	< 0.101	0.101	0	0	0	0	0	0	0		
Sulfate	0.021	0.101	0	0	0	0	0	0	0		J

Sample ID: LCS2_06115A	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	Run ID: IC-761_061115A
Client ID: ZZZZZ	Batch ID: R8698	TestNo: E300		Analysis Date: 11/15/2006	SeqNo: 121607

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	1.82	0.101	2.02	0	90.1	90	110	0	0		
Sulfate	1.983	0.101	2.02	0.021	97.1	90	109	0	0		

Sample ID: 0611009-001AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	Run ID: IC-761_061115A
Client ID: Section 11 NW to SE	Batch ID: R8698	TestNo: E300		Analysis Date: 11/15/2006	SeqNo: 121613

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	46.98	2.00	40.4	10.14	91.2	80	117	0	0		
Sulfate	115.1	2.00	40.4	74.48	101	90	112	0	0		

Sample ID: 0611009-001AD	SampType: DUP	TestCode: 300_W	Units: mg/L	Prep Date:	Run ID: IC-761_061115A
Client ID: Section 11 NW to SE	Batch ID: R8698	TestNo: E300		Analysis Date: 11/15/2006	SeqNo: 121612

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.64	2.00	0	0	0	0	0	10.14	5.06	12	
Sulfate	74.28	2.00	0	0	0	0	0	74.48	0.269	10.5	

EXHIBIT I

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B_CATIONS

Sample ID: MB_061109B	SampType: MBLK	TestCode: 6010B_CATI	Units: mg/L	Prep Date:	Run ID: ICP_1_061109B
Client ID: ZZZZZ	Batch ID: R8673	TestNo: SW6010B		Analysis Date: 11/9/2006	SeqNo: 121298

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	< 0.0210	0.0210									
Magnesium	< 0.0100	0.0100									
Calcium	< 0.0490	0.0490									
Sodium	< 0.0800	0.0800									
Potassium	< 0.0400	0.0400									

Sample ID: MB2_061110A	SampType: MBLK	TestCode: 6010B_CATI	Units: mg/L	Prep Date:	Run ID: ICP_1_061110A
Client ID: ZZZZZ	Batch ID: R8672	TestNo: SW6010B		Analysis Date: 11/10/2006	SeqNo: 121337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	0.01121	0.0490									J
Sodium	< 0.0800	0.0800									

Sample ID: LCS_061109B	SampType: LCS	TestCode: 6010B_CATI	Units: mg/L	Prep Date:	Run ID: ICP_1_061109B
Client ID: ZZZZZ	Batch ID: R8673	TestNo: SW6010B		Analysis Date: 11/9/2006	SeqNo: 121299

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	5.094	0.0210	5	0	102	75	125	0	0		
Magnesium	4.871	0.0100	5	0	97.4	75	125	0	0		
Calcium	4.593	0.0490	5	0	91.9	75	125	0	0		
Sodium	4.994	0.0800	5	0	99.9	75	125	0	0		
Potassium	4.904	0.0400	5	0	98.1	75	125	0	0		

Sample ID: LCS2_061110A	SampType: LCS	TestCode: 6010B_CATI	Units: mg/L	Prep Date:	Run ID: ICP_1_061110A
Client ID: ZZZZZ	Batch ID: R8672	TestNo: SW6010B		Analysis Date: 11/10/2006	SeqNo: 121338

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	4.74	0.0490	5	0.01121	94.6	75	125	0	0		
Sodium	4.88	0.0800	5	0	97.6	75	125	0	0		

EXHIBIT H

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B_CATIONS

Sample ID: **LCSD_061109B** SampType: **LCSD** TestCode: **6010B_CATI** Units: **mg/L** Prep Date: Run ID: **ICP_1_061109B**
Client ID: **ZZZZZ** Batch ID: **R8673** TestNo: **SW6010B** Analysis Date: **11/9/2006** SeqNo: **121300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	5.038	0.0210	5	0	101	75	125	5.094	1.11	20	
Magnesium	4.826	0.0100	5	0	96.5	75	125	4.871	0.928	20	
Calcium	4.573	0.0490	5	0	91.5	75	125	4.593	0.443	20	
Sodium	4.955	0.0800	5	0	99.1	75	125	4.994	0.787	20	
Potassium	4.878	0.0400	5	0	97.6	75	125	4.904	0.535	20	

Sample ID: **LCSD2_061110A** SampType: **LCSD** TestCode: **6010B_CATI** Units: **mg/L** Prep Date: Run ID: **ICP_1_061110A**
Client ID: **ZZZZZ** Batch ID: **R8672** TestNo: **SW6010B** Analysis Date: **11/10/2006** SeqNo: **121339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	4.631	0.0490	5	0.01121	92.4	75	125	4.74	2.33	20	
Sodium	4.722	0.0800	5	0	94.4	75	125	4.88	3.29	20	

Sample ID: **0611008-001AMS** SampType: **MS** TestCode: **6010B_CATI** Units: **mg/L** Prep Date: Run ID: **ICP_1_061109B**
Client ID: **ZZZZZ** Batch ID: **R8673** TestNo: **SW6010B** Analysis Date: **11/9/2006** SeqNo: **121305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	1119	2.10	500	607.5	102	75	125	0	0		
Magnesium	561.1	1.00	500	74.65	97.3	75	125	0	0		
Calcium	1021	4.90	500	547.4	94.7	75	125	0	0		
Sodium	1008	8.00	500	501	101	75	125	0	0		
Potassium	520.5	4.00	500	30.99	97.9	75	125	0	0		

Sample ID: **0611008-001AMSD** SampType: **MSD** TestCode: **6010B_CATI** Units: **mg/L** Prep Date: Run ID: **ICP_1_061109B**
Client ID: **ZZZZZ** Batch ID: **R8673** TestNo: **SW6010B** Analysis Date: **11/9/2006** SeqNo: **121306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	1117	2.10	500	607.5	102	75	125	1119	0.221	20	
Magnesium	562.2	1.00	500	74.65	97.5	75	125	561.1	0.189	20	
Calcium	1014	4.90	500	547.4	93.3	75	125	1021	0.669	20	
Sodium	1003	8.00	500	501	100	75	125	1008	0.511	20	

EXHIBIT H

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B_CATIONS

Sample ID: **0611008-001AMSD**	SampType: **MSD**	TestCode: **6010B_CATI**	Units: **mg/L**	Prep Date:	Run ID: **ICP_1_061109B**
Client ID: **ZZZZZ**	Batch ID: **R8673**	TestNo: **SW6010B**		Analysis Date: **11/9/2006**	SeqNo: **121306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	522.9	4.00	500	30.99	98.4	75	125	520.5	0.452	20	

Exhibit H

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: ALK_W

Sample ID: LCS_061108H	SampType: LCS	TestCode: ALK_W	Units: mg/L CaCO3	Prep Date:	Run ID: WET CHEM_061108H
Client ID: ZZZZZ	Batch ID: R8666	TestNo: M2320 B		Analysis Date: 11/8/2006	SeqNo: 121212

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	451	5.0	459.2	0	98.2	80	120	0	0		

Sample ID: 0611007-001AD	SampType: DUP	TestCode: ALK_W	Units: mg/L CaCO3	Prep Date:	Run ID: WET CHEM_061108H
Client ID: ZZZZZ	Batch ID: R8666	TestNo: M2320 B		Analysis Date: 11/8/2006	SeqNo: 121223

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	1501	5.0	0	0	0	0	0	1474	1.82	20	
Alkalinity, Carbonate (As CaCO3)	40	5.0	0	0	0	0	0	48	18.2	20	
Alkalinity, Hydroxide	ND	5.0	0	0	0	0	0	0	0	20	
Alkalinity, Total (As CaCO3)	1541	5.0	0	0	0	0	0	1522	1.24	20	

Exhibit I

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: PH_W

Sample ID: LCS_061108C	SampType: LCS	TestCode: PH_W	Units: pH units	Prep Date:	Run ID: WET CHEM_061108C
Client ID: ZZZZZ	Batch ID: R8659	TestNo: E150.1		Analysis Date: 11/8/2006	SeqNo: 121176

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.29	1.00	7.38	0	98.8	98	102	0	0		

Sample ID: 0611009-001AD	SampType: DUP	TestCode: PH_W	Units: pH units	Prep Date:	Run ID: WET CHEM_061108C
Client ID: Section 11 NW to SE	Batch ID: R8659	TestNo: E150.1		Analysis Date: 11/8/2006	SeqNo: 121179

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.967	1.00	0	0	0	0	0	7.925	0.529	2	
Temperature	20.5	0	0	0	0	0	0	20.3	0.980	0	

EXHIBIT H

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: RES_W

Sample ID: LCS_061108B	SampType: LCS	TestCode: RES_W	Units: ohm-m	Prep Date:	Run ID: WET CHEM_061108B
Client ID: ZZZZZ	Batch ID: R8658	TestNo: M2510 C		Analysis Date: 11/8/2006	SeqNo: 121172

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Resistivity	10	0.00100	10.02	0	99.8	90	110	0	0		

Sample ID: 0611009-001AD	SampType: DUP	TestCode: RES_W	Units: ohm-m	Prep Date:	Run ID: WET CHEM_061108B
Client ID: Section 11 NW to SE	Batch ID: R8658	TestNo: M2510 C		Analysis Date: 11/8/2006	SeqNo: 121174

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Resistivity	18.83	0.00100	0	0	0	0	0	18.9	0.371	10	

EXHIBIT 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: SPGR_W

Sample ID: **LCS_061108A**	SampType: **LCS**	TestCode: **SPGR_W**	Units: **Units**	Prep Date:	Run ID: **WET CHEM_061108A**
Client ID: **ZZZZZ**	Batch ID: **R8657**	TestNo: **M2710 F**		Analysis Date: **11/8/2006**	SeqNo: **121168**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Gravity	1	0.001000	1	0	100	80	120	0	0		

Sample ID: **0611009-001AD**	SampType: **DUP**	TestCode: **SPGR_W**	Units: **Units**	Prep Date:	Run ID: **WET CHEM_061108A**
Client ID: **Section 11 NW to SE**	Batch ID: **R8657**	TestNo: **M2710 F**		Analysis Date: **11/8/2006**	SeqNo: **121170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Gravity	1.001	0.001000	0	0	0	0	0	1.001	0	15	

EXHIBIT H

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Permits West
Work Order: 0611009
Project: Section 11

ANALYTICAL QC SUMMARY REPORT

TestCode: TDS_W

Sample ID: MBLK_061113C	SampType: MBLK	TestCode: TDS_W	Units: mg/L	Prep Date:	Run ID: WET CHEM_061113C
Client ID: ZZZZZ	Batch ID: R8704	TestNo: E160.1		Analysis Date: 11/13/2006	SeqNo: 121686

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	ND	25.0									

Sample ID: LCS_061113C	SampType: LCS	TestCode: TDS_W	Units: mg/L	Prep Date:	Run ID: WET CHEM_061113C
Client ID: ZZZZZ	Batch ID: R8704	TestNo: E160.1		Analysis Date: 11/13/2006	SeqNo: 121687

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	1153	25.0	1170	0	98.5	80	120	0	0		

Sample ID: 0611014-005AD	SampType: DUP	TestCode: TDS_W	Units: mg/L	Prep Date:	Run ID: WET CHEM_061113C
Client ID: ZZZZZ	Batch ID: R8704	TestNo: E160.1		Analysis Date: 11/13/2006	SeqNo: 121694

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	908	25.0	0	0	0	0	0	896	1.33	10	

Sample ID: 0611009-001AD	SampType: DUP	TestCode: TDS_W	Units: mg/L	Prep Date:	Run ID: WET CHEM_061113C
Client ID: Section 11 NW to SE	Batch ID: R8704	TestNo: E160.1		Analysis Date: 11/13/2006	SeqNo: 121697

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	334	25.0	0	0	0	0	0	330	1.20	10	

Exhibit I

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

iiná bá

Sample Receipt Checklist

Client Name: **PW1001**

Date and Time Received: **11/8/2006 9:40:00 AM**

Work Order Number: **0611009**

Received by: jem

Checklist completed by: D Moore 11/8/06 (Signature / Date)

Reviewed by: JK 11/8/06 (Initials / Date)

Matrix:

Carrier name: Charles Black

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked by: _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: Sample in cooler not on ice. Sample received within 1hr of sampling event

Corrective Action: _____

EXHIBIT H

CHAIN OF CUSTODY RECORD

5569

Hiná bá (for life's sake)
612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
Phone: (505) 327-1072 • Fax: (505) 327-1496

Date 11/8/06 Page _____ of _____

REPORT RESULTS TO:

Report to: Brian Wood
Company: Permits West
Address: 37 Verano Loop
City: Santa Fe, NM 87508
Phone: 466 5120 Fax: Email:

SEND INVOICE TO:

PO No.: Job No.:
Name: Permits West
Company: 37 Verano Loop
Address: Santa Fe, NM 87508
City:

Turnaround Time:
10 days (normal) ____
24-48 hours (100%) X
3-5 days (50%) ____

Sample Integrity
Intact X
On Ice NW 16°C

Subcontract
Yes ____
No X

Sampling Location:

Sample Identification	Sample Date	Sample Time	Matrix	Pres.	NUMBER OF CONTAINERS: API	Lab ID
Section 11 - NW to SE	11/8/06	9:00	H2O	4°		0611009-001

Analysis Requested

	Date/Time		Date/Time
Relinquished by: Chris Black	Date/Time: 11/8/06 9:30	Received by: J Moore	Date/Time: 11/8/06 9:40
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Comments:

EXHIBIT H

DISTRIBUTION WHITE - Lab • YELLOW - Client • PINK - Courier

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

BLM
1235 LaPlata Highway
Farmington, NM 87401

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Tsah Tah SWD #11 Total Depth: ≈4,510'
Additional Disposal Zones: La Ventana & Menefee (from ≈2,469' to ≈4,162')
Location: 970' FSL & 1510' FWL Sec. 11, T. 24 N., R. 10 W.,
San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

B. Wood

Brian Wood

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

Mike Hanson
Coleman Oil & Gas Inc.
P. O. Drawer 3337
Farmington, NM 87499-3337

Dear Mike,

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

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San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

7006 0100 0001 7759 9262

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City, State, ZIP+4 Farmington NM 87499

PS Form 3800, June 2002 See Reverse for Instructions

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

Ty Stillman
EOG Resources, Inc.
600 17th St., Suite 1000-N
Denver, CO 80202-5402

Dear Ty,

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Tsah Tah SWD #11 Total Depth: ≈4,510'
Additional Disposal Zones: La Ventana & Menefee (from ≈2,469' to ≈4,162')
Location: 970' FSL & 1510' FWL Sec. 11, T. 24 N., R. 10 W.,
San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

7006 0100 0001 7759 9279

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Sent To: EOG
Street, Apt. No.; or PO Box No.: 600 17th St # 1000 N
City, State, ZIP+4: Denver CO 80202

PS Form 3800, June 2002 See Reverse for Instructions

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

North American Petro. Corp. USA
16191 Highway 40
Folsom, LA 70437

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Tsah Tah SWD #11 Total Depth: ≈4,510'
Additional Disposal Zones: La Ventana & Menefee (from ≈2,469' to ≈4,162')
Location: 970' FSL & 1510' FWL Sec. 11, T. 24 N., R. 10 W.,
San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

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APR 2007

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Street, Apt. No.; or PO Box No. 16191 Hwy 40
City, State, ZIP+4 Folsom LA 70437

PS Form 3800, June 2002 See Reverse for Instructions

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

Baseline Minerals Inc.
518 17th St., Suite 950
Denver, CO 80202

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Tsah Tah SWD #11 Total Depth: ≈4,510'
Additional Disposal Zones: La Ventana & Menefee (from ≈2,469' to ≈4,162')
Proposed Disposal Zone: Point Lookout (from ≈4,100' to ≈4,250')
Location: 970' FSL & 1510' FWL Sec. 11, T. 24 N., R. 10 W.,
San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

7004 1160 0002 4710 6646

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Total Postage & Fees	$ 5.84

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Sent To Baseline
Street, Apt. No.; or PO Box No. 518 17th, #950
City, State, ZIP+4 Denver CO 80202

PS Form 3800, June 2002 See Reverse for Instructions

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

Jane Seiler
Questar Market Resources
1050 17th St., Suite 500
Denver, Co. 80265

Dear Jane,

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

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San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

7004 1160 0002 4910 0659

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PS Form 3800, June 2002 See Reverse for Instructions

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

April 19, 2007

Lambert Yazzie
Blanco Trading Post

Dear Mr. Yazzie:

Rosetta Resources Operating LP is applying (see attached application) to amend the approval for its existing Tsah Tah SWD #11 water disposal well. As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following 2 proposed additional water disposal zones. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Tsah Tah SWD #11 Total Depth: ≈4,510'
Additional Disposal Zones: La Ventana & Menefee (from ≈2,469' to ≈4,162')
Location: 970' FSL & 1510' FWL Sec. 11, T. 24 N., R. 10 W.,
San Juan County, NM on BLM lease NMNM-112955
Approximate Location: ≈27 air miles south of Bloomfield, NM
Applicant Name: Rosetta Resources Operating LP (720) 359-9144
Applicant's Address: 1200 17th St., Suite 770, Denver, CO 80202

Submittal Information: Application for a water disposal well will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

Will Hand Deliver

AFFIDAVIT OF PUBLICATION

Ad No. 54951

STATE OF NEW MEXICO
County of San Juan:

ROBIN ALLISON, being duly sworn says: That she is the CLASSIFIED MANAGER of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication and appeared in the Internet at The Daily Times web site on the following day(s):

Thursday, April 12, 2007

And the cost of the publication is $56.98

Robin Allison

ON 4/13/07 ROBIN ALLISON appeared before me, whom I know personally to be the person who signed the above document.

Wynell Casey

My Commission Expires November 17, 2008

COPY OF PUBLICATION

Rosetta Resources Operating LP is applying to amend its approval for the Tsah Tah SWD 11 water disposal well. The Tsah Tah SWD 11 is located at 970' FSL & 1510' FWL, Sec. 11, T. 24 N., R. 10 W., San Juan County, NM. The well is currently approved to dispose of water produced from oil and gas wells into the Point Lookout sandstone at a depth of 4,100' to 4,250' at a maximum rate of 2,000 barrels of water per day and at a maximum pressure of 820 psi. Rosetta is applying to add two zones (La Ventaria Tongue of the Cliff House and Menefee), increase the volume to a maximum of 3,000 bwpd, and decrease maximum pressure to 490 psi. If approved in its entirety, then the disposal interval would be from 2,469' to 4,250'. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contracting Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.

Legal No. 54951 published in The Daily Times, Farmington, New Mexico on Thursday April 12, 2007

EXHIBIT J

Key Pressure Pumping Services

Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

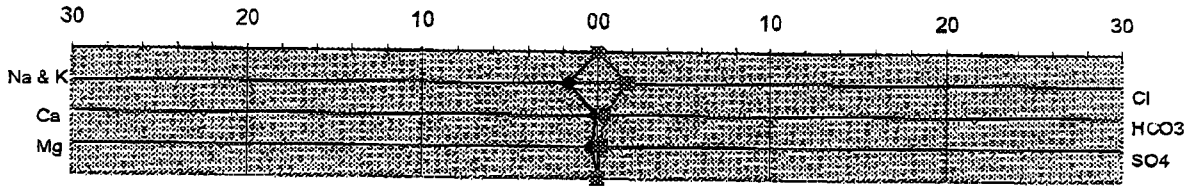
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	POINT LOOKOUT	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	4181	Source:	Swab Run #6

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.010	47 (°F)	S.G. (Corrected):	1.010	
pH:	10.00		MAGNESIUM:	77	ppm
RESISTIVITY:	0.40	ohm/meter	CALCIUM:	40	ppm
IRON:	0.46	ppm	BICARBONATES:	483	ppm
H2S:	0	ppm	CHLORIDES:	13465	ppm
POTASSIUM:	38	ppm	SODIUM :	8752	ppm
SULFATES:	97	ppm	TDS:	22953	ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote

Stiff Plot



Data contained in this document is based on the best information & most current test procedures and materials available.
No liability is expressed or implied.

Key Pressure Pumping Services

Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

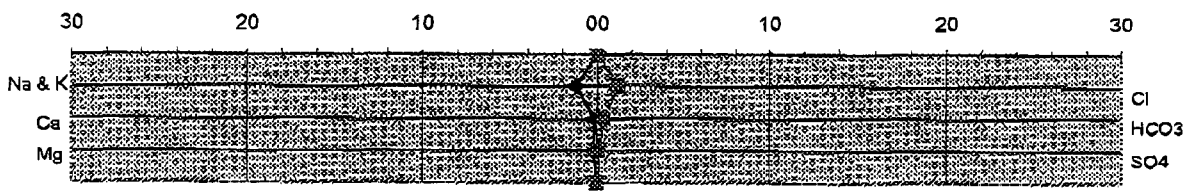
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	CLIFFHOUSE	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	2469	Source:	Swab Run #1

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.005	59 (°F)	S.G. (Corrected):	1.005	
pH:	8.50		MAGNESIUM:	48	ppm
RESISTIVITY:	0.70	ohm/meter	CALCIUM:	56	ppm
IRON:	0.10	ppm	BICARBONATES:	486	ppm
H2S:	0	ppm	CHLORIDES:	9552	ppm
POTASSIUM:	38	ppm	SODIUM :	6240	ppm
SULFATES:	23	ppm	TDS:	16443	ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote

Stiff Plot



Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

Key Pressure Pumping Services

Water Analysis Result Form
Farmington, NM.
708 S. Tucker
Phone:(505)325-4192
Fax:(505)564-3524
Zip:87401

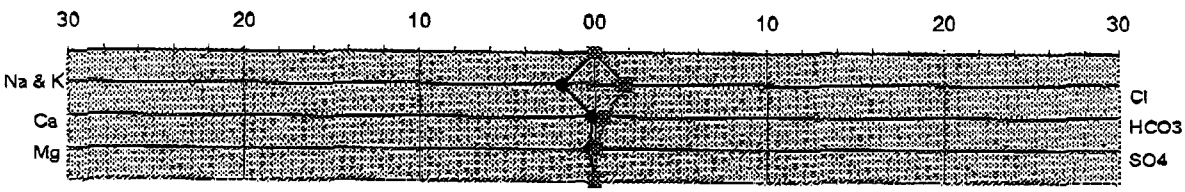
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	Menefee	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	3645	Source:	Swab Run #1

PHYSICAL AND CHEMICAL DETERMINATION

SPECIFIC GRAVITY:	1.010	52 (°F)	S.G. (Corrected):	1.010	
pH:	9.00		MAGNESIUM:	77	ppm
RESISTIVITY:	0.80	ohm/meter	CALCIUM:	63	ppm
IRON:	0.16	ppm	BICARBONATES:	725	ppm
H2S:	0	ppm	CHLORIDES:	14653	ppm
POTASSIUM:	11	ppm	SODIUM :	9586	ppm
SULFATES:	32	ppm	TDS:	25149	ppm

CaCO3 Scale Tendency = Remote
CaSO4 Scale Tendency = Remote

Stiff Plot



Data contained in this document is based on the best information & most current test procedures and materials available. No liability is expressed or implied.

WALSH ENGINEERING & PRODUCTION CORPORATION

WORKOVER AND COMPLETION REPORT

Operator:	**Rosetta Resources**		**Well Name:**	Tsah Tah SWD #11			
Date:	12-Mar-07		**Report #:**	1			
Field:	Mesa Verde	**Location:**	11/24N/10W	**County:**	San Juan	**State:**	NM
Contractor:	Mesa Well Service #211		**Supervisor:**	Russell Mcquitty			

Work Summary:

Move on location and rig up Mesa Well Service #211 in the afternoon. NU well head, rig up pump & pit. SDON.

Daily Costs:

Road & Location		Tubulars	
Rig Costs	$1,500	Wellhead Equipment	
Equipment Rental		Subsurface Equipment	
Logging & Perforating		Artificial Lift Equipment	
Stimulation		Sucker Rods	
Testing (Tracer)		Tanks	
Cementing		Bailer	
Completion Fluids		Flowlines	
Contract Services		Installation/Labor	
Miscellaneous Supplies		Fittings, Valves, Etc..	
Engr. & Supervision	$400	Meters, Lact, Etc..	
Slick line		Electrical Equipment	
Other (heat tanks)			
		Total Daily Costs	$1,900
		Cumulative Costs	$1,900

Well Record

TD:	4510' KB		Run in well					
PBTD:	4496' KB		**Tubing**		Joints		Grade	
Casing Size:	5-1/2", 15.5#		Wt		Thread		Length	
DV @ 2224'	14' KB		Tubing Subs				Length	
Perforations			Seating Nipple				Length	
						Top of tbg to KB		
				Bottom of Tubing/Production String Landed at:				
SPF:			**Rods**		Size			
			Rods		Size			
Pulled from well			Pony subs					
Tubing			**Pump**					
Packer			Packer Depth					
Rods			Type					
Pump			How set					

WALSH ENGINEERING & PRODUCTION CORPORATION

WORKOVER AND COMPLETION REPORT

Operator:	**Rosetta Resources**		**Well Name:**	Tsah Tah SWD #11			
Date:	13-Mar-07		**Report #:**	2			
Field:	Mesa Verde	**Location:**	11/24N/10W	**County:**	San Juan	**State:**	NM
Contractor:	Mesa Well Service #211		**Supervisor:**		Russell McQuitty		

Work Summary:

Nippled up the BOP and rigged up floor. Picked up a 4-3/4" cone bit on six 3-1/8" drill collars and a 2-3/8" workstring. Tagged the cement top at 2185' KB. Picked up the swivel and drilled the cement and stage tool at 2224'. Circulated the hole clean. TIH and tagged cement at 4480', picked up swivel and drilled cement to PBTD at 4496'KB, circulated hole clean. Tested casing and DV tool to 1100psi, good test. TOOH and SDON.

Daily Costs:

Road & Location		Tubulars	
Rig Costs	$3,800	Wellhead Equipment	
Equipment Rental		Subsurface Equipment	
Logging & Perforating		Artificial Lift Equipment	
Stimulation		Sucker Rods	
Testing (Tracer)		Tanks	
Cementing		Bailer	
Completion Fluids	$200	Flowlines	
Contract Services		Installation/Labor	
Miscellaneous Supplies		Fittings, Valves, Etc..	$450
Engr. & Supervision	$800	Meters, Lact, Etc..	
Trucking	$2,250	Rentals	$150
Other (heat tanks)			
		Total Daily Costs	$7,650
		Cumulative Costs	$9,550

Well Record

TD:	4510' KB		Run in well					
PBTD:	4496' KB		**Tubing**		Joints		Grade	
Casing Size:	5-1/2", 15.5#		Wt		Thread		Length	
DV @ 2224'	14' KB		Tubing Subs				Length	
Perforations			Seating Nipple				Length	
						Top of tbg to KB		
				Bottom of Tubing/Production String Landed at:				
SPF:			**Rods**		Size			
			Rods		Size			
Pulled from well			Pony subs					
Tubing			**Pump**					
Packer			Packer Depth					
Rods			Type					
Pump			How set					

WALSH ENGINEERING & PRODUCTION CORPORATION

WORKOVER AND COMPLETION REPORT

Operator:	**Rosetta Resources**		**Well Name:**	Tsah Tah SWD #11			
Date:	14-Mar-07		**Report #:**	3			
Field:	Mesa Verde	**Location:**	11/24N/10W	**County:**	San Juan	**State:**	NM
Contractor:	Mesa Well Service #211		**Supervisor:**	Russell McQuitty			

Work Summary:

Rigged up Blue Jet and ran cased hole gamma ray / casing collar locator log from PBTD (loggers TD was 4492' KB) to 2200'. Correlated cased hole logs with open hole logs and perforated Point Lookout at 4181'KB, Menefee at 3645'KB and the La Ventana (Cliffhouse) at 2469'KB at 2 spf (0.34", total of 6 holes). Rigged down wireline. Picked up a 5-1/2" RBP, retrieving head, seating nipple, one joint of 2-3/8" tubing, and a 5-1/2" packer. TIH on 2-3/8" tubing and set the RBP at 4281'KB, pulled up hole and set packer at 4173'KB (packing elements), seating nipple is at 4209' KB. Picked up swab tools. Initial fluid level at 200', swabbed to 4000' in 5 runs. Made a total of 7 runs, hesitating 1 hr between 6th and 7th, and swabbed a total of 14.9 bbls. Runs 6 & 7 we recovered no fluid. SDON. We will continue swabbing until reaching formation fluids at approx 17bbls recovered.

Daily Costs:

Road & Location		Tubulars	
Rig Costs	$3,800	Wellhead Equipment	
Equipment Rental		Subsurface Equipment	
Logging & Perforating	$2,185	Artificial Lift Equipment	
Stimulation		Sucker Rods	
Testing (Tracer)		Tanks	
Cementing		RBP/ Pkr	$3,185
Completion Fluids		Flowlines	
Contract Services		Installation/Labor	
Miscellaneous Supplies		Fittings, Valves, Etc..	
Engr. & Supervision	$800	Meters, Lact, Etc..	
Trucking		Rentals	$150
Other (heat tanks)			
		Total Daily Costs	$10,120
		Cumulative Costs	$19,670

Well Record

TD:	4510' KB		Run in well						
PBTD:	4496' KB		**Tubing**		Joints		Grade		
Casing Size:	5-1/2", 15.5#		Wt		Thread		Length		
DV @ 2224'	14' KB		Tubing Subs				Length		
Perforations	2469' ; 3645' ; 4181'		Seating Nipple				Length		
						Top of tbg to KB			
				Bottom of Tubing/Production String Landed at:					
SPF:			**Rods**		Size				
			Rods		Size				
Pulled from well			Pony subs						
Tubing			**Pump**						
Packer			Packer Depth						
Rods			Type						
Pump			How set						

WALSH ENGINEERING & PRODUCTION CORPORATION

WORKOVER AND COMPLETION REPORT

Operator:	**Rosetta Resources**		**Well Name:**	Tsah Tah SWD #11			
Date:	15-Mar-07		**Report #:**	4			
Field:	Mesa Verde	**Location:**	11/24N/10W	**County:**	San Juan	**State:**	NM
Contractor:	Mesa Well Service #211		**Supervisor:**		Russell McQuitty		

Work Summary:

(Pt. Lookout, perfs at 4181'KB)Ran in with swab tools, made 6 runs and recovered 3.1 bbls of fluid, collected samples on runs #5 & #6. Unset packer, TIH and retrieved RBP. Pulled up hole and set RBP at 3728'KB, pulled up hole and set packing elements at 3620'KB with seating nipple at 3656'KB.

(Menefee, perfs at 3645'KB) Ran in with swab tools, made 9 runs and recovered 25bbls of fluid, collected samples on last 3 runs. Unset packer, TIH and retrieved RBP. Pulled up hole and set RBP 2558'KB, pulled up hole and set packing elements at 2450'KB with seating nipple at 2483'KB.

(La Ventana, perfs at 2469'KB) Ran in with swab tools, made 10 runs and recovered 18bbls of fluid, collected samples on last 2 runs. Unset packer, TIH and retrieved RBP. TOOH with packer and RBP. Shut in well and SDON. We will LD Tbg and DC's out of derrick, rig down and MOL in A.M.

Daily Costs:

Road & Location		Tubulars	
Rig Costs	$3,800	Wellhead Equipment	
Equipment Rental		Subsurface Equipment	
Logging & Perforating		Artificial Lift Equipment	
Stimulation		Sucker Rods	
Testing (Tracer)		Tanks	
Cementing		RBP/ Pkr	$1,210
Completion Fluids		Flowlines	
Contract Services		Installation/Labor	
Miscellaneous Supplies		Fittings, Valves, Etc..	
Engr. & Supervision	$800	Meters, Lact, Etc..	
Trucking		Rentals	$150
Other (heat tanks)			
		Total Daily Costs	$5,960
		Cumulative Costs	$25,630

Well Record

TD:	4510' KB		Run in well					
PBTD:	4496' KB		**Tubing**		Joints		Grade	
Casing Size:	5-1/2", 15.5#		Wt		Thread		Length	
DV @ 2224'	14' KB		Tubing Subs				Length	
Perforations	2469' ; 3645' ; 4181'		Seating Nipple				Length	
						Top of tbg to KB		
				Bottom of Tubing/Production String Landed at:				
SPF:			**Rods**		Size			
			Rods		Size			
Pulled from well			Pony subs					
Tubing			**Pump**					
Packer			Packer Depth					
Rods			Type					
Pump			How set					

WALSH ENGINEERING & PRODUCTION CORPORATION

WORKOVER AND COMPLETION REPORT

Operator:	**Rosetta Resources**			**Well Name:**	Tsah Tah SWD #11		
Date:	16-Mar-07			**Report #:**	5		
Field:	Mesa Verde	**Location:**	11/24N/10W	**County:**	San Juan	**State:**	NM
Contractor:	Mesa Well Service #211			**Supervisor:**	Russell McQuitty		

Work Summary:

TIH with 2-3/8" tbg out of derrick and LD singles on trailer. LD DC's. Wait for call on water analysis to verify formation fluids. Water sample analysis; (Pt. Lookout perfs at 4181'; TDS=22953, Potassium=570); (Menefee perfs at 3645'; TDS=25175.5, Potassium=11); (La Ventana (Cliffhouse) perfs at 2469'; TDS=16567, Potassium=38). ND BOP, install mandrel in well head and shut well in. Rig down and released Mesa Well Service rig #211.

Daily Costs:

Road & Location		Workstring Rental	$2,500
Rig Costs	$3,200	Wellhead Equipment	$1,695
Equipment Rental		Drill Collar Rental	$3,200
Logging & Perforating		Artificial Lift Equipment	
Stimulation		Sucker Rods	
Testing (Tracer)		Tanks	
Cementing		RBP/ Pkr	
Completion Fluids		Flowlines	
Contract Services		Installation/Labor	
Miscellaneous Supplies		Fittings, Valves, Etc..	
Engr. & Supervision	$800	Meters, Lact, Etc..	
Trucking		Rentals	$150
Other (heat tanks)			
		Total Daily Costs	$11,545
		Cumulative Costs	$37,175

Well Record

TD:	4510' KB		Run in well						
PBTD:	4496' KB		**Tubing**		Joints		Grade		
Casing Size:	5-1/2", 15.5#		Wt		Thread		Length		
DV @ 2224'	14' KB		Tubing Subs				Length		
Perforations	2469' ; 3645' ; 4181'		Seating Nipple				Length		
						Top of tbg to KB			
				Bottom of Tubing/Production String Landed at:					
SPF:			**Rods**		Size				
			Rods		Size				
Pulled from well			Pony subs						
Tubing			**Pump**						
Packer			Packer Depth						
Rods			Type						
Pump			How set						

Jones, William V., EMNRD

From: Charles Campbell [Charles.Campbell@rosettaresources.com]

Sent: Wednesday, May 09, 2007 10:53 AM

To: Jones, William V., EMNRD

Cc: Hayden, Steven, EMNRD; brianwood; Paul Thompson; Ed Seeman; Ben Funderburk; Gordon Harrington

Subject: Rosetta SWD permitting-Menefee-San Juan County, NM

Mr. Jones

Rosetta requests administrative approval for injection into the Menefee member of the Mesa Verde Formation in its Tsah Tah SWD 11 (11-24N-10W) well.

Rosetta has already secured a permit for injection into the Point Lookout member of the Mesa Verde in the SWD 11 well. Currently pending before the commission is an application to permit the Menefee and Cliff House members of the Mesa Verde Formation in SWD 11.

Rosetta is aware of the concern for the Cliff House Formation and would like to move forward in permitting and completing for injection the Menefee member in the existing SWD 11. The injection rate into the Point Lookout in Rosetta SWD 36 (36-25N-10W) after frac is approximately 600 barrels of water per day. Rosetta has 22 Fruitland wells drilled to date with 14 producing and needs more capacity to dispose of the produced water. Timely approval of the Menefee member for the SWD 11 would allow Rosetta to complete the Point Lookout and Menefee zones at the same time, saving money and allowing Rosetta to begin disposal into SWD 11.

SWD 11 is drilled and logged.
The top of the Menefee is found in SWD 11 at 3197' as stated in the pending application. The top perf of the injection zone is expected to be at 3392'.

Please contact me with any questions or for clarification on any issue.

Respectfully

Charles W. Campbell
Senior Geologist
Rosetta Resources

720-946-1328

303-907-7552 cell

Jones, William V., EMNRD

From: Walker.Jim@epamail.epa.gov
Sent: Tuesday, May 08, 2007 3:02 PM
To: Jones, William V., EMNRD
Cc: Hayden, Steven, EMNRD
Subject: Re: Another Cliff House Question

Bill,

I couldn't open and view the log sections that you sent, but I have copies of the logs for the subject well that BLM was able to download and print for me. My calculations for the interval at 2470 to 2480 feet indicate a salinity of 3300 ppm, based on an Rwa analysis from the induction and density logs. Rw in that interval equals 1.50 ohm-meters based on my analysis, using the standard Humble equation for calculation of Rw.

I agree with your analysis of the effects of invasion of relatively fresh mud filtrate and the resistivity response indicating in situ formation water being fresher than the filtrate in the La Ventana formation but saltier in the Point Lookout formation. My calculation of Rw in the La Ventana interval confirms that.

Regards,

Jim Walker
Environmental Engineer
US EPA Region 9
Ground Water Office
Navajo UIC Program
Farmington Field Office
(505) 599-6317

"Jones, William V., EMNRD" <William.V.Jones@state.nm.us>
05/08/2007 12:23 PM

To: Jim Walker/R9/USEPA/US@EPA
cc: "Hayden, Steven, EMNRD" <steven.hayden@state.nm.us>
Subject: Another Cliff House Question

Hello Jim:
If you have time, please look at the interval in the La Ventana near 2470 to 2480 and let me know if this calculates less than 10,000 ppm of TDS - or what salinity do you come up with?

I copied these logs and deleted the REPEAT and the CALIBRATION but nothing else - and the file sizes may be small enough to email, I hope.
They also have an Sp on them.

1) This well is only 2 miles from the Coleman's Juniper #1

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, May 08, 2007 12:24 PM
To: 'Walker.Jim@epamail.epa.gov'
Cc: Hayden, Steven, EMNRD
Subject: Another Cliff House Question

Attachments: Copy of 3004534082_1_WL.tif; Copy of 3004534082_2_WL.tif


Copy of 4534082_1_WL.tif (


Copy of 4534082_2_WL.tif (

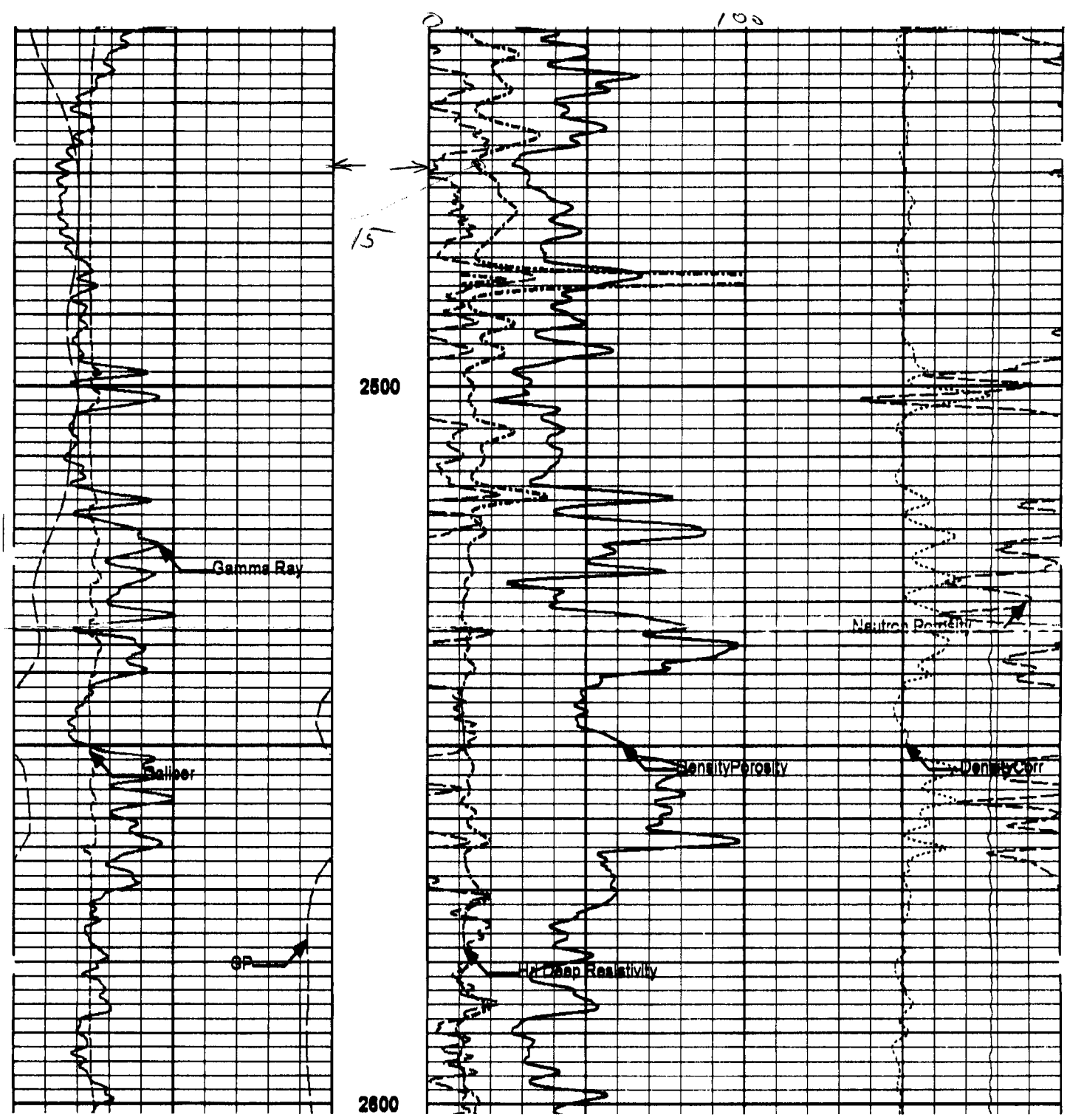
Hello Jim:
If you have time, please look at the interval in the La Ventana near 2470 to 2480 and let me know if this calculates less than 10,000 ppm of TDS - or what salinity do you come up with?

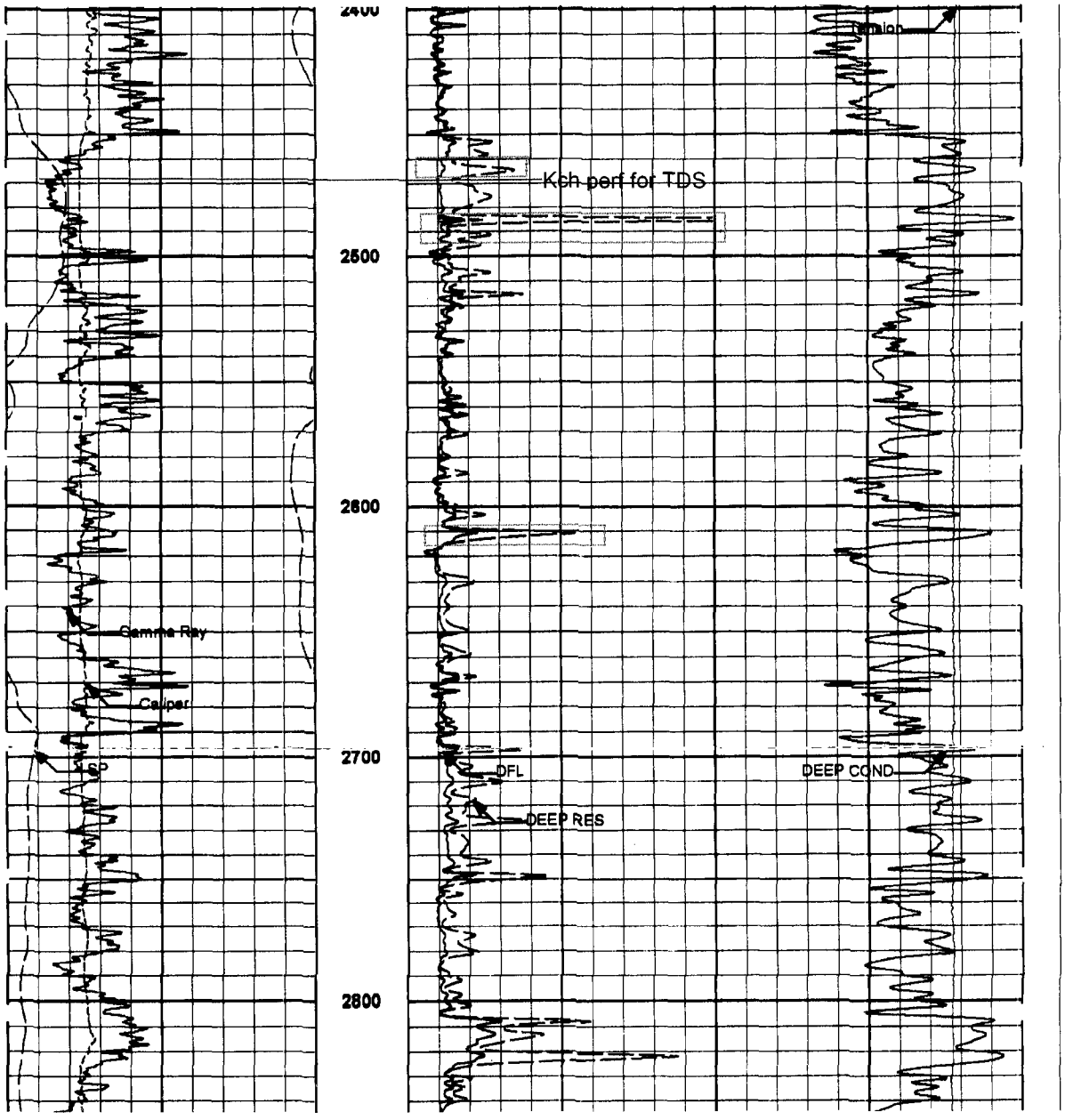
I copied these logs and deleted the REPEAT and the CALIBRATION but nothing else - and the file sizes may be small enough to email, I hope. They also have an Sp on them.

1) This well is only 2 miles from the Coleman's Juniper #1 well where the La Ventana looked pretty fresh from log calculations AND
2) The mud they drilled with is reasonably fresh and the separation of the resistivity curves in this invaded zone shows that insitu waters to be FRESHER than the mud filtrate. If you scan down into the Point Lookout the resistivity curves are inverted showing the Point Lookout may be saltier than the mud filtrate. Let me know if you agree with me on that one?

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448


0
100
15
2500
Gamma Ray
Neutron Porosity
Caliber
DensityPorosity
DensityCorr
SP
Hr Deep Resistivity
2600


2400
2500
2600
2700
2800
Kch perf for TDS
Gamma Ray
Caliper
SP
DFL
DEEP RES
DEEP COND