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December 9, 2008

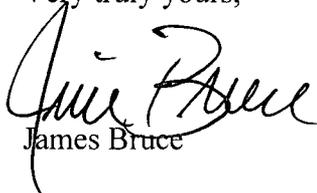
Case 14265

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

Dear Florene:

Enclosed for filing, on behalf of Rosetta Resources Operating LP, are an original and one copy of two applications for approval of a salt water disposal well, together with proposed advertisements. The advertisements have also been e-mailed to the Division. Please set these matters for the January 8, 2009 Examiner hearing. Thank you.

Very truly yours,


James Bruce

Attorney for Rosetta Resources Operating LP

PERSONS BEING NOTIFIED

Tsah Tah SWD Well No. 11:

Coleman Oil & Gas, Inc.
P.O. Box 3337
Farmington, New Mexico 87149

Questar Exploration & Production Co.
P.O. Box 45601
Salt Lake City, Utah 84145

Bureau of Land Management
1235 LaPlata Highway
Farmington, New Mexico 87401

Tsah Tah SWD Well No. 11:

J Bar Cane, Inc.
P.O. Box 16
Stanley, New Mexico 87056

XTO Energy Inc.
Suite 2000
810 Houston Street
Fort Worth, Texas 76102

Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

Kaiser-Francis Oil Co.
P.O. Box 21468
Tulsa, Oklahoma 74121

W.R. Speer
900 Crestview Drive
Farmington, New Mexico 87401

Oil, Gas and Minerals Division
Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF ROSETTA RESOURCES
OPERATING LP FOR APPROVAL OF A SALT
WATER DISPOSAL WELL, SAN JUAN
COUNTY, NEW MEXICO.

Case No. 14265

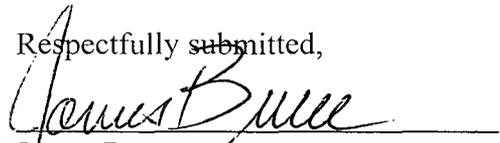
APPLICATION

Rosetta Resources Operating, LP applies for an order approving a salt water disposal well, and in support thereof, states:

1. Applicant has drilled its Tsah Tah SWD Well No. 11 at a location 970 feet from the south line and 1510 feet from the west line of Section 11, Township 24 North, Range 10 West, N.M.P.M., San Juan County, New Mexico.
2. The well was permitted as a salt water disposal well in the Menefee and Point Lookout zones of the Mesa Verde formation by Division Administrative Order Nos. SWD-1063 and SWD-1063-A, for the purposes of injecting produced water.
3. Applicant requests permission to add the Cliff House zone of the Mesa Verde formation, at depths of 2450-3198 feet, as a disposal zone.
4. A Form C-108 for the well is attached hereto as Exhibit A.
5. 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 this application.

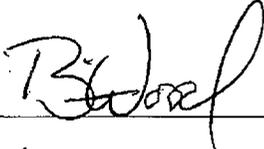
Respectfully submitted,



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

Attorney for Rosetta Resources Operating
LP

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance YES Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes XXX 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 & SWD-1063-A
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: BRIAN WOOD TITLE: CONSULTANT
SIGNATURE:  DATE: NOV. 21, 2008
E-MAIL ADDRESS: brian@permitswest.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, please show the date and circumstances of the earlier submittal: _____

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.

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: CLIFF HOUSE

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 3,248' - 3,818' IN MENEFFEE & 4,172' - 4,310' IN POINT LOOKOUT

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')

INJECTION WELL DATA SHEET

OPERATOR: ROSETTA RESOURCES OPERATING LP

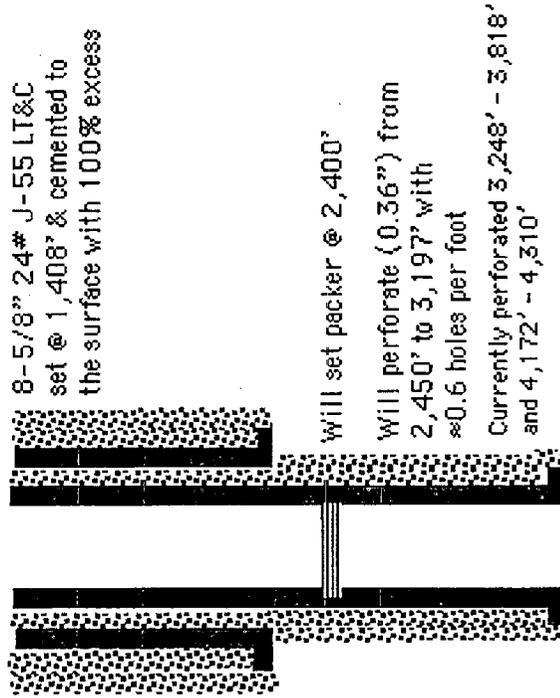
WELL NAME & NUMBER: TAH TAH SWD #11

WELL LOCATION: 970' FSL & 1510' FWL
FOOTAGE LOCATION

UNIT LETTER N SECTION 11 TOWNSHIP 24 N RANGE 10 W

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 ft³

Top of Cement: SURFACE

Method Determine: VISUAL

Intermediate Casing

Hole Size:

Casing Size:

Cemented with: _____ sacks or _____ ft³

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 ft³

Top of Cement: SURFACE

Method Determine: VISUAL

Total Depth: 4,510'

Injection Interval

From 2,450 feet To 4,346 feet

(Perforated or Open Hole; indicate which)

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

PAGE 1

I. Purpose is to add one more zone (Cliff House) for additional water disposal capacity. (Well was drilled and completed in 2007.)

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., San Juan County
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) is set at 1,408' KB in a 12-1/4" hole. Led 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% CaCl₂ + 1/4 pound per sack cello flake. Circulated 60 barrels to the surface.

Production casing (5-1/2", 24#, J-55, L T & C) landed at 4,509' 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.

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 + 1/8 pound per sack poly flake. Circulated 40 barrels to the surface. 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. Circulated 8 barrels to the surface.

- A. (3) Tubing is 2-7/8" 6.5# J-55 plastic lined injection string. It is currently set at 3,199'. It will be reset at 2,400' KB (i. e, 50' above highest perforation, which will be 2,450').
- 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 $\approx 50'$ of the highest perforation. Thus, packer will be set at $\approx 2,400'$ which will be $\approx 50'$ above the top perforation of $\approx 2,450'$.
- B. (1) Initial disposal zones were the Menefee (3,197' - 4,166' which was perforated with 0.36" holes from 3,248' to 3,818') and Point Lookout (4,166' - 4,346' which was perforated with 0.36" holes from 4,172' to 4,310') sandstones. Rosetta plans to add the Cliff House 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 were perforated with two 0.34" shots per foot (2 shots per zone x 3 zones = total 6 shots). Cliff House was perforated at 2,469' KB. Menefee was perforated at 3,645' KB, and Point Lookout was perforated at 4,181' KB. For disposal purposes, Menefee was perforated with 432 holes (≈ 1.3 holes per foot) and Point Lookout was perforated with 238

holes (≈ 0.6 holes per foot). Upon approval, additional similar perforations will be shot in the Cliff House (2,450' - 3,197').

- B. (3) Well has been drilled. It was and 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). Cliff House 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 Cliff House (2,450' - 3,197'). For disposal purposes, the Menefee is perforated from 3,248' to 3,818' and the Point Lookout is perforated from 4,172' to 4,310'.
- B. (5) Top of the Cliff House is at 2,411'. Highest current Cliff House perforation is at 2,469'. Highest proposed Cliff House perforation will be 2,450'. Bottom of the closest overlying potentially productive zone (Pictured Cliffs) is at 1,838'. There will be a 612' interval between the bottom of the Pictured Cliffs and the highest injection perforation at 2,450'. Searches of NMOCD and Go-Tech web sites did not find any records of oil or gas production from the Cliff House.

Bottom of the Cliff House is at 3,197'. Top of the closest underlying potentially productive zone (Gallup) is at $\approx 5,186'$. There will be a $\approx 1,989'$ interval between the bottom of the Cliff House and the top of the Gallup. Within this $\approx 1,989'$ interval are the Menefee and Point Lookout zones which are 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).

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

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

V. A map (Exhibit B) showing 3 existing well bores (2 Rosetta Tsah Tah wells + 1 stock watering well) within a half mile radius is attached. A map (Exhibit C) showing all 86 wells (40 P & A + 41 oil or gas producers + 5 water) within a two mile radius is attached. Details on the three wells within a half mile are:

<u>WELL</u>	<u>API 30-045</u>	<u>T24N, R10W</u>	<u>ZONE</u>	<u>STATUS</u>	<u>TD</u>	<u>DISTANCE</u>
Tsah Tah 11 #3	-34047	SWSW Sec. 11	Fruitland coal	P & A	1,872'	306'
Tsah Tah 11 #3R	-34713	SWSW Sec. 11	Fruitland coal	Gas Well*	1,870'	319'
Yazzie stock well	N/A	NWSE Sec. 11	Nacimiento	Water Well	≈800'***	>1/4 mile

*spudded 11-4-08, not yet completed

**no depth record found in family, Federal, state, or Tribal offices; depth based on conversation with Mr. Yazzie

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

<u>AREA</u>	<u>LESSOR</u>	<u>LEASE #</u>	<u>LESSEE</u>
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
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. None of the three wells which are within a 1/2 mile radius penetrate the proposed injection zone. The deepest (Rosetta's Tsah Tah 11 #3) of the three wells has a total depth of 1,872'. There will be a 578' interval between the bottom of that gas well and the highest proposed perforation (2,450').

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

- VII. 1. Average injection rate will be \approx 2,000 bwpd.
 Maximum injection rate will be \approx 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 \approx 450 psi
 Maximum injection pressure will be \approx 508 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 has 41 Fruitland coal gas wells in Townships 24 and 25
 North, Range 10 West. Water analyses (Exhibit F) from the Cliff
 House in this well are attached. Three produced water analyses
 (Exhibit G) from the Basin Fruitland coal are also attached. A
 summary follows. All are Rosetta Tsah Tah wells.

Well:	2-4	33-2	34-4	SWD 11
Where:	2-24n-10w	33-25n-10w	34-25n-10w	11-24n-11w
What Zone:	Fruitland	Fruitland	Fruitland	Cliff House
<u>Parameter</u>				
Barium	2.44	3.19	2.26	Not Analyzed
Bicarbonate	518.5	786.9	549.0	486
Calcium	800	400	960	56
Chloride	19,000	18,000	16,000	9,552
Iron	27.62	46.22	21.77	0.10
Magnesium	344.04	245.22	149.33	48
pH	7.3	6.8	7.0	8.5
Sodium	10,906	10,980	9,166	6,240
Sulfate	zero	zero	2.0	23
TDS	31,599	30,462	26,851	16,443

5. The Cliff House is not 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 Cliff House in the San Juan Basin. 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.

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

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VIII. The Cliff House is a coastal marine sandstone of the Late Cretaceous. It is 786' thick in this well. Top is at 2,411'. Bottom is at 3,197'. Perforated interval will be 2,450' - 3,197'.

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: 2,411'
Menefee: 3,197'
Point Lookout Sandstone: 4,162'
Mancos Shale: 4,350'
Plugged Back Total Depth: 4,496'
Total Depth: 4,510'

There is one water well within a one mile radius. It is a stock watering well $\approx 1/4$ 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 Cliff House. Likely aquifers are the Nacimiento and Ojo Alamo. From close to far, the five water wells are:

stock well $\approx 1/4$ mile NE in NWSE Sec. 11
windmill ≈ 1.2 miles SW in NWNW Sec. 15
two Mission wells $\approx 1-3/4$ 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 Cliff House within a two mile radius. There will be $\approx 1,311'$ of vertical separation between the bottom of the deepest (1,100') water well (Dugan) within ≈ 1.95 miles and the top of the Cliff House.

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

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IX. The zone will be stimulated with a sand-water fracture (e. g., 20/40 Brady with slick water and 15% HCl).

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 exact depth is unknown, but a family member believes it to be $\approx 800'$ deep. It is $\approx 1/4$ mile northeast in the NWSE of Section 11. Water analysis are attached as Exhibit H. 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 Cliff House is in hydrologic connection with any underground sources of water. There will be 1,311' of vertical separation between the top (2,411') of the Cliff House and the bottom (1,100') of the deepest water well within ≈ 1.95 miles. This interval includes at least one shale zone (Lewis).

XIII. Notice (this application) will be sent to the surface owner (BLM), operators of all wells, and lessees or lease operating right holders within a half mile.

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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

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

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

AMENDED REPORT
OIL CONS. DIV.
DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

2006 NOV 27 PM 12:39

*API Number 30-045- 34082		*Pool Code 96160	RECEIVED 070 FARMINGTON NM	*Pool Name SWD: MESA VERDE
*Property Code 35715	*Property Name TSAH TAH SWD		*Well Number 11	
*OGRD No. 239235	*Operator Name ROSETTA RESOURCES OPERATING LP		*Elevation 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

*Dedicated Acres: *Joint or Infill: *Consolidation Code: *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.

Brian Wood

Signature: BRIAN WOOD
Printed Name: CONSULTANT
Date: NOV. 23, 2006

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.

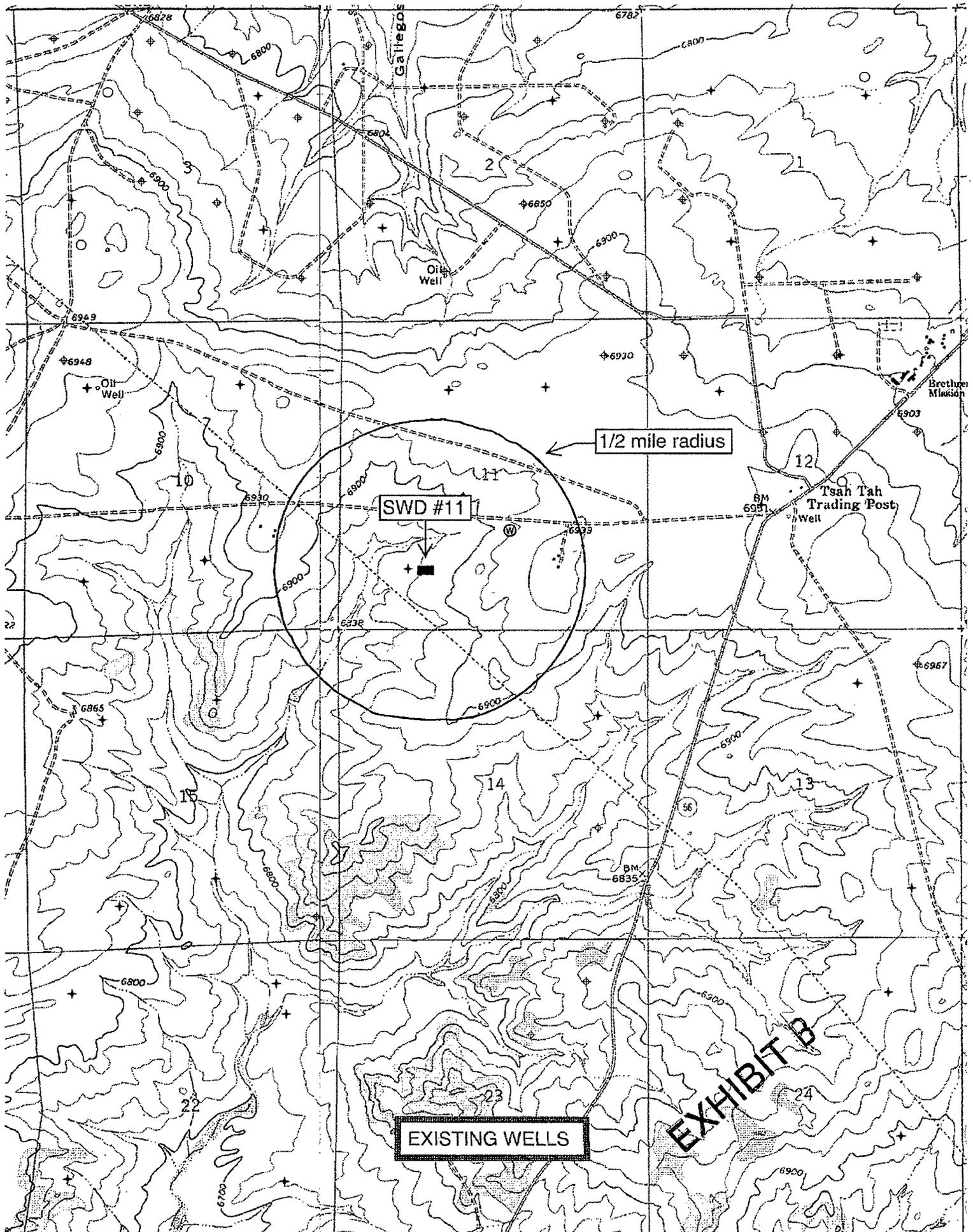
SEPTEMBER 23 2006

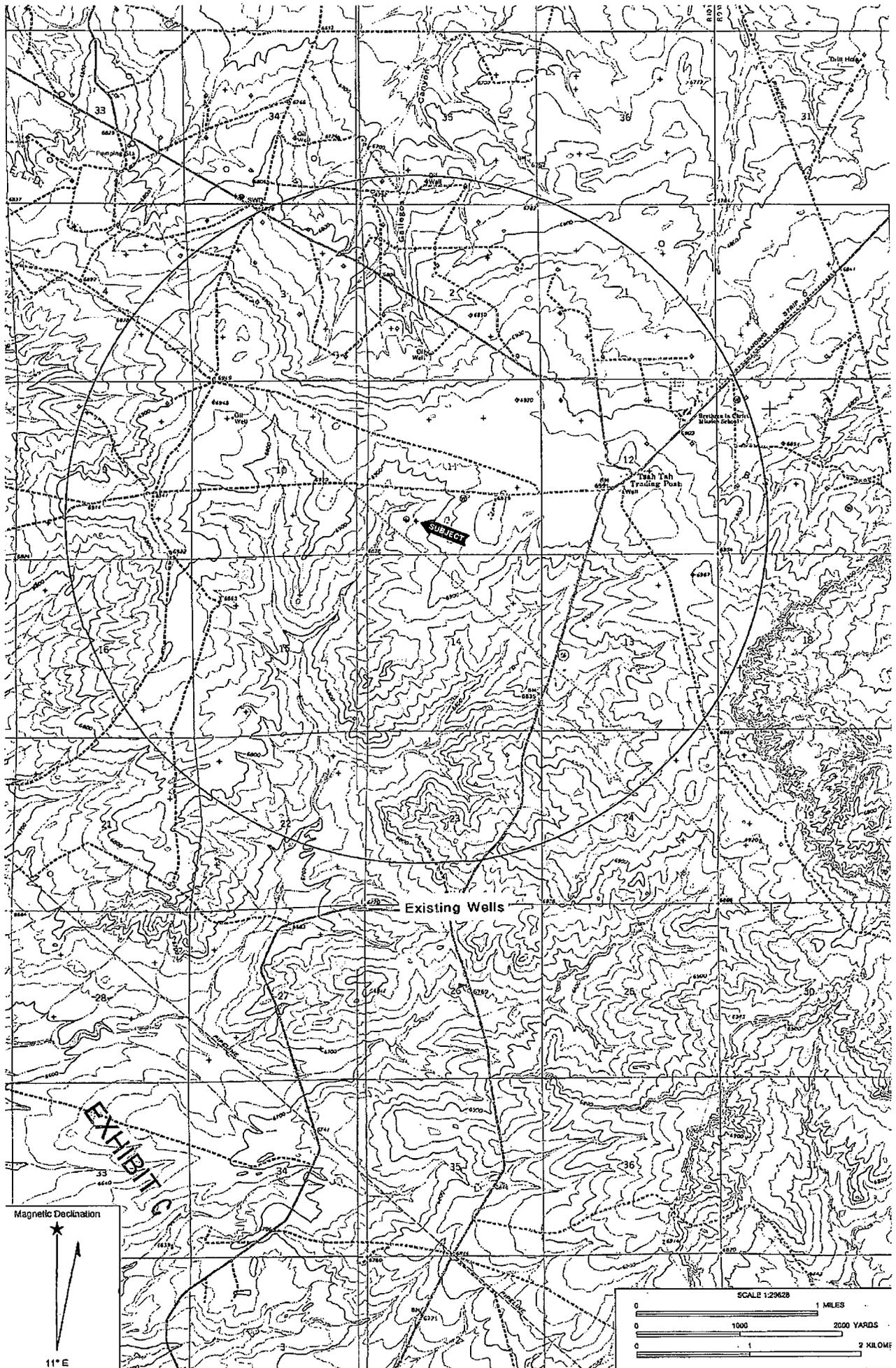
Date of Survey

Signature and Seal of Professional Surveyor

DAVID RUSSELL
Certificate Number: 10201

EXHIBIT A





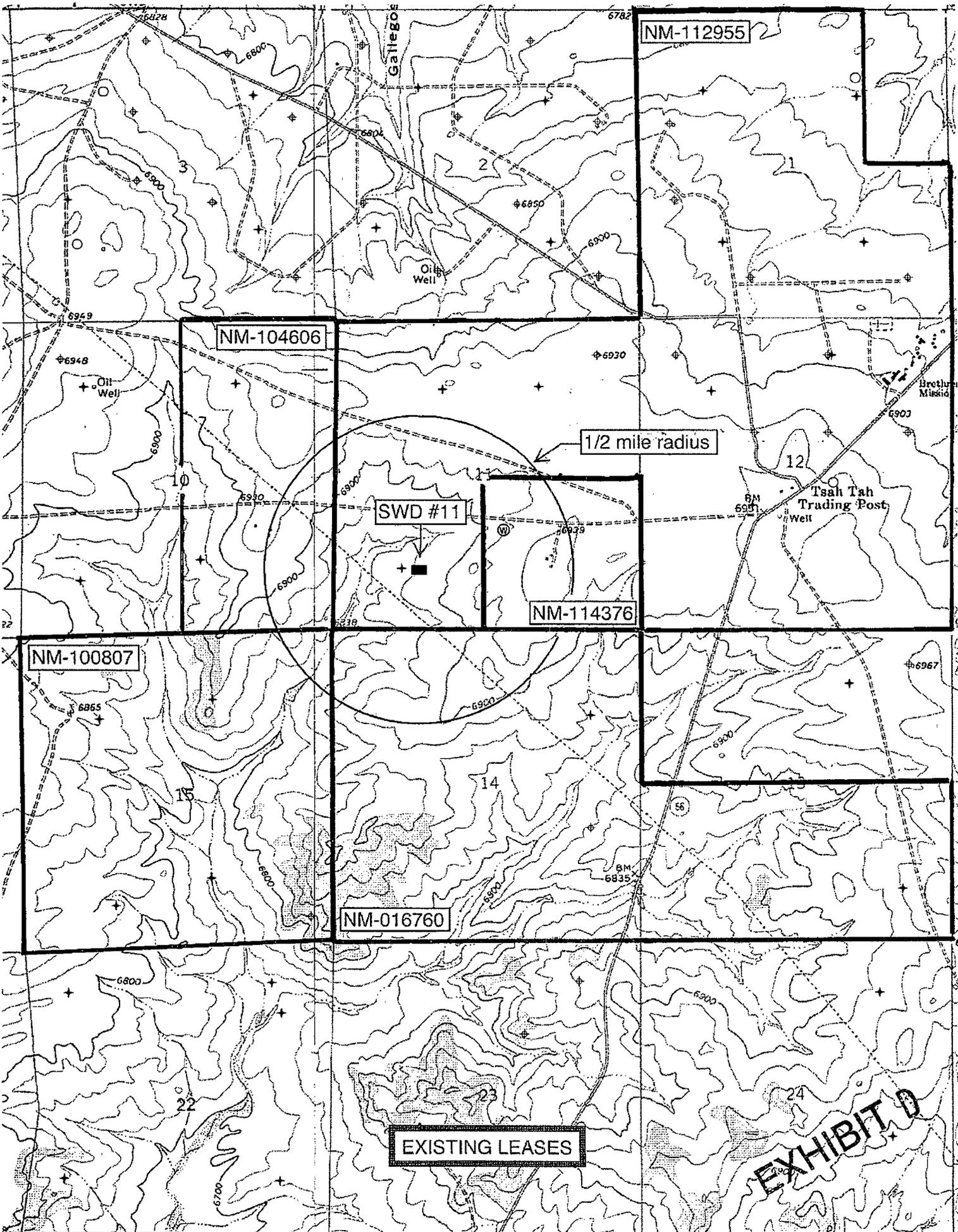


EXHIBIT D



Key Pressure Pumping Services

Water Analysis Result Form

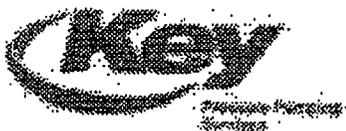
Farmington, NM.

708 S. Tucker

Phone:(505)325-4192

Fax:(505)564-3524

Zip:87401



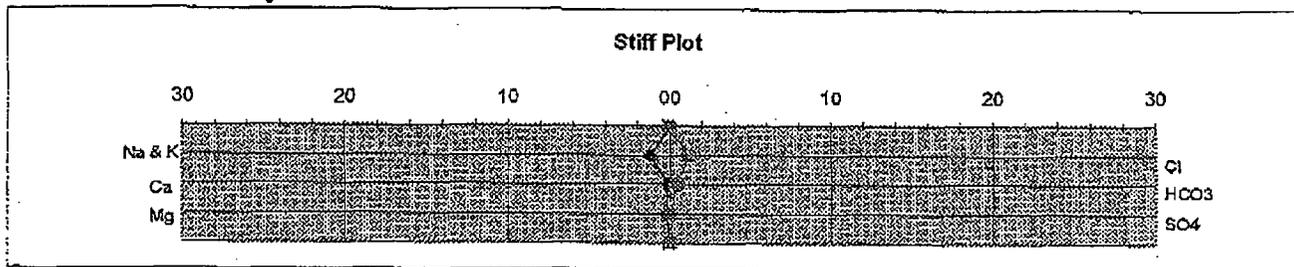
Operator:	Rosetta Resources	Sample Date:	March 15, 2007
		Analysis Date:	March 17, 2007
Well	Tsah Tah SWD # 11	District:	Farmington
Formation:	CLIFFHOUSE	Requested By:	RUSS McQUITTY
County:	SAN JUAN N.M.	Technician:	BEN BARELA
Depth:	2469	Source:	Swab Run #1

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:	0.19	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



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

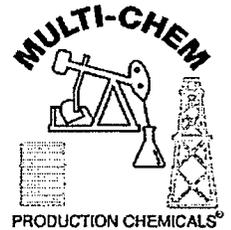
Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 2 #4

Sample Point: 2 #4



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:

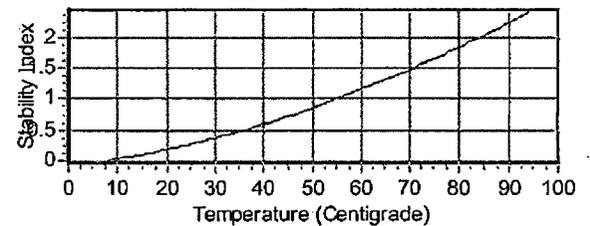
Calcium Carbonate scaling index is positive above 9 degrees Centigrade. Calcium Sulfate scale is not indicated from 0 to 100 degrees Centigrade. Barium Sulfate scale is not indicated from 0 to 100 degrees Centigrade.

Remarks:

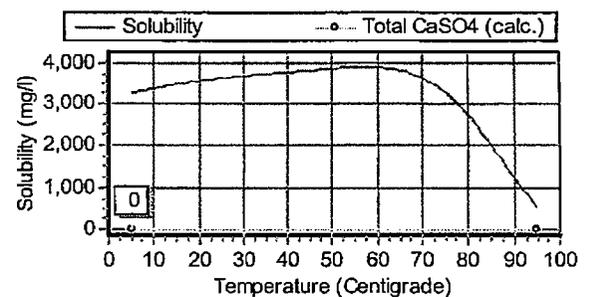
EXHIBIT G

Scaling Indices vs. Temperature

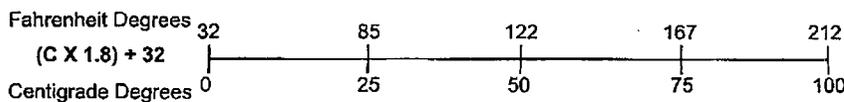
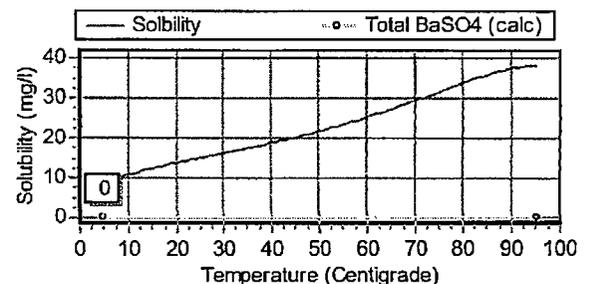
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis Analysis #: 1059

Company: Rosetta Resources

Lease: -

Location: Farmington, New Mexico

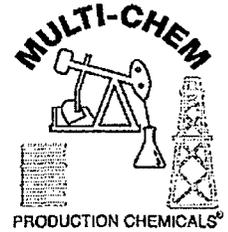
Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 33 #2

Sample Point: 33 #2



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

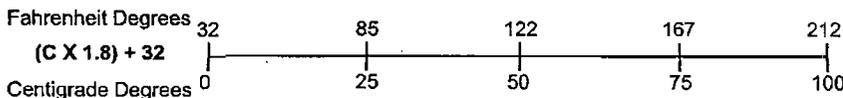
Total Dissolved Solids (Mg/l)	30,462
Total Ionic Strength	0.5402
Maximum CaSO4, (calc.)	0.00
Maximum BaSO4, (calc.)	0.00
Total SRB (colonies/cc)	
Total APB (colonies/cc)	
Total Aerobic (colonies/cc)	
Manganese (Mg/l):	0.43

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.

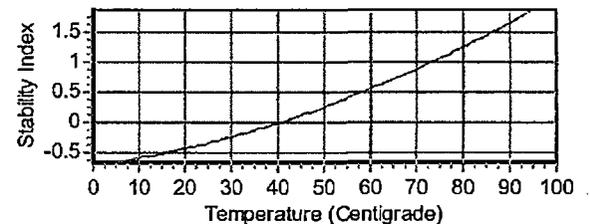
Remarks:

EXHIBIT G

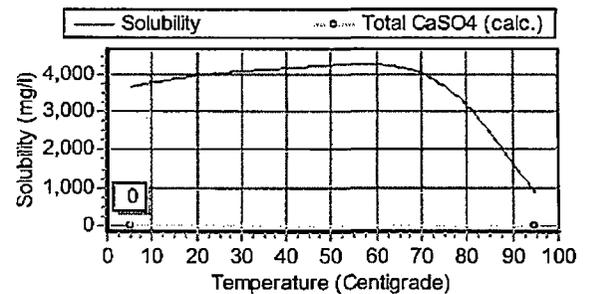


Scaling Indices vs. Temperature

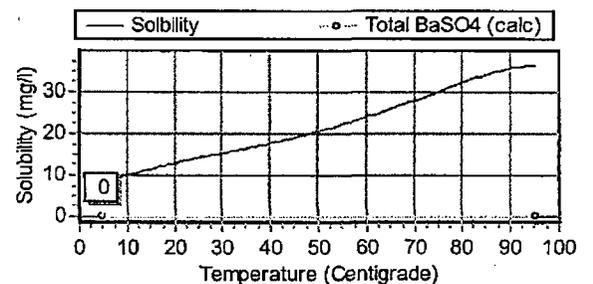
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Water Analysis Analysis #: 1060

Company: Rosetta Resources

Lease: .

Location: Farmington, New Mexico

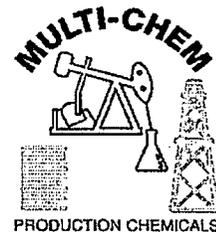
Date: January 16, 2007

Attention: Bryan Enns

Description:

Well: Tsah Tah 34 #4

Sample Point: 34 #4



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

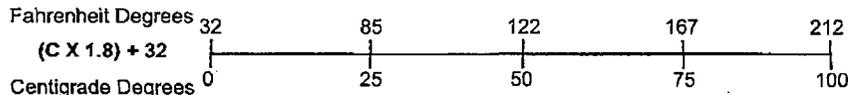
Total Dissolved Solids (Mg/l)	26,851
Total Ionic Strength	0.4905
Maximum CaSO4, (calc.)	2.85
Maximum BaSO4, (calc.)	3.87
Total SRB (colonies/cc)	
Total APB (colonies/cc)	
Total Aerobic (colonies/cc)	
Manganese (Mg/l):	0.26

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.

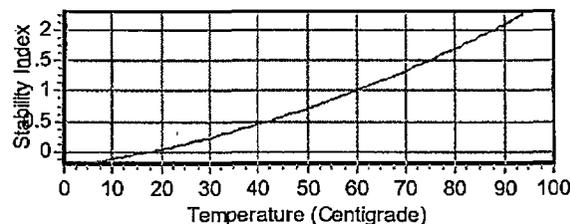
Remarks:

EXHIBIT G

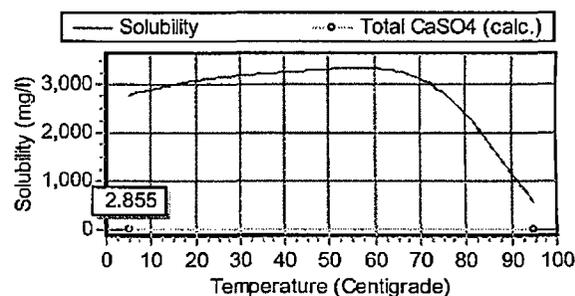


Scaling Indices vs. Temperature

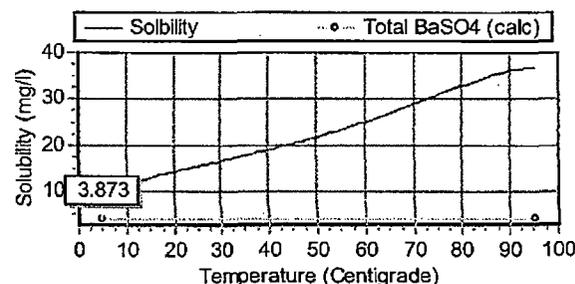
Calcium Carbonate Saturation Index



Calcium Sulfate Solubility



Barium Sulfate Solubility



Hall Environmental Analysis Laboratory, Inc.

Date: 07-Jan-08

CLIENT:	Permits West	Client Sample ID:	Yazzie 11-Well
Lab Order:	0712325	Collection Date:	12/19/2007 4:45:00 PM
Project:	Yazzie-11 Well	Date Received:	12/20/2007
Lab ID:	0712325-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
						Analyst: SMP
Chloride	8.3	0.10		mg/L	1	12/21/2007 12:31:12 PM
Sulfate	57	0.50		mg/L	1	12/21/2007 12:31:12 PM
EPA 6010B: HARDNESS						
						Analyst: TES
Hardness (As CaCO3)	67	1.0		mg/L	1	12/31/2007
EPA METHOD 6010B: DISSOLVED METALS						
						Analyst: TES
Calcium	21	1.0		mg/L	1	12/31/2007 3:47:20 PM
Iron	0.41	0.020		mg/L	1	1/7/2008 10:25:05 AM
Magnesium	3.3	1.0		mg/L	1	12/31/2007 3:47:20 PM
Potassium	1.3	1.0		mg/L	1	12/31/2007 3:47:20 PM
Sodium	76	1.0		mg/L	1	12/31/2007 3:47:20 PM
SM 2320B: ALKALINITY						
						Analyst: LMM
Alkalinity, Total (As CaCO3)	160	20		mg/L CaCO3	1	12/21/2007
Carbonate	ND	2.0		mg/L CaCO3	1	12/21/2007
Bicarbonate	160	20		mg/L CaCO3	1	12/21/2007
Hydroxide	ND	2.0		mg/L CaCO3	1	12/21/2007
EPA 120.1: SPECIFIC CONDUCTANCE						
						Analyst: LMM
Specific Conductance	470	0.010		µmhos/cm	1	12/21/2007
SM4500-H+B: PH						
						Analyst: LMM
pH	8.03	0.1		pH units	1	12/21/2007
SPECIFIC GRAVITY BY SM 2710F						
						Analyst: TAF
Specific Gravity	1.0	0			1	1/2/2008
SM 2540C: TDS						
						Analyst: TAF
Total Dissolved Solids	280	20		mg/L	1	12/26/2007

EXHIBIT H1

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

QA/QC SUMMARY REPORT

Client: Permits West
 Project: Yazzie-11 Well

Work Order: 0712325

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		MBLK							
Chloride	ND	mg/L	0.10						
Sulfate	ND	mg/L	0.50						
Batch ID:	R26660								Analysis Date: 12/21/2007 6:33:02 AM
Sample ID: MB-b		MBLK							
Chloride	ND	mg/L	0.10						
Sulfate	ND	mg/L	0.50						
Batch ID:	R26660								Analysis Date: 12/22/2007 12:07:29 AM
Sample ID: LCS		LCS							
Chloride	5.036	mg/L	0.10	101	90	110			
Sulfate	10.18	mg/L	0.50	102	90	110			
Batch ID:	R26660								Analysis Date: 12/21/2007 6:50:27 AM
Sample ID: LCS-b		LCS							
Chloride	4.999	mg/L	0.10	100	90	110			
Sulfate	10.02	mg/L	0.50	100	90	110			

Method: SM 2320B: Alkalinity									
Sample ID: 0712325-01AMSD		MSD							
Alkalinity, Total (As CaCO3)	247.0	mg/L CaC	20	105	80	120	0.806	20	12/21/2007
Sample ID: MB		MBLK							
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						12/21/2007
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: LCS		LCS							
Alkalinity, Total (As CaCO3)	83.00	mg/L CaC	20	104	80	120			12/21/2007
Sample ID: 0712325-01AMS		MS							
Alkalinity, Total (As CaCO3)	249.0	mg/L CaC	20	107	80	120			12/21/2007

EXHIBIT H

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Permits West
 Project: Yazzie-11 Well

Work Order: 0712325

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: MB		MBLK			Batch ID:	R	Analysis Date:	2/1/2007 12:02:33 PM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sample ID: MB		MBLK			Batch ID:	R	Analysis Date:	3/24/2007 3:01:21 PM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: MB		MBLK			Batch ID:	R	Analysis Date:	4/3/2007 8:32:55 AM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: MB		MBLK			Batch ID:	R	Analysis Date:	5/14/2007 4:01:36 PM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: MB		MBLK			Batch ID:	R	Analysis Date:	5/18/2007 10:31:26 AM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: MB		MBLK			Batch ID:	R26764	Analysis Date:	12/31/2007 3:02:12 PM	
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS		LCS			Batch ID:	R	Analysis Date:	2/1/2007 12:05:11 PM	
Calcium	45.61	mg/L	1.0	90.3	80	120			
Iron	0.4538	mg/L	0.020	90.8	80	120			
Magnesium	46.17	mg/L	1.0	91.4	80	120			
Potassium	49.36	mg/L	1.0	89.7	80	120			
Sample ID: LCS		LCS			Batch ID:	R	Analysis Date:	3/24/2007 3:04:14 PM	
Calcium	ND	mg/L	1.0	0	80	120			S
Iron	0.4847	mg/L	0.020	96.9	80	120			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

EXHIBIT H
 Page 2

QA/QC SUMMARY REPORT

Client: Permits West
Project: Yazzie-11 Well

Work Order: 0712325

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: LCS		LCS							
					Batch ID:	R	Analysis Date:	3/24/2007 3:04:14 PM	
Magnesium	ND	mg/L	1.0	0	80	120			
Potassium	ND	mg/L	1.0	0	80	120			
Sodium	ND	mg/L	1.0	0	80	120			
Sample ID: LCS		LCS							
					Batch ID:	R	Analysis Date:	4/3/2007 8:35:47 AM	
Calcium	52.88	mg/L	1.0	105	80	120			
Iron	0.5100	mg/L	0.020	100	80	120			
Magnesium	52.49	mg/L	1.0	104	80	120			
Potassium	55.47	mg/L	1.0	100	80	120			
Sodium	56.30	mg/L	1.0	111	80	120			
Sample ID: LCS		LCS							
					Batch ID:	R	Analysis Date:	5/14/2007 4:04:48 PM	
Calcium	48.26	mg/L	1.0	95.6	80	120			
Iron	0.4749	mg/L	0.020	95.0	80	120			
Magnesium	48.91	mg/L	1.0	96.8	80	120			
Potassium	52.03	mg/L	1.0	94.6	80	120			
Sodium	53.01	mg/L	1.0	105	80	120			
Sample ID: LCS		LCS							
					Batch ID:	R26764	Analysis Date:	12/31/2007 3:04:40 PM	
Calcium	50.99	mg/L	1.0	101	80	120			
Iron	0.4909	mg/L	0.020	98.2	80	120			
Magnesium	51.84	mg/L	1.0	103	80	120			
Potassium	55.71	mg/L	1.0	101	80	120			
Sodium	55.37	mg/L	1.0	110	80	120			

Method: SM 2540C: TDS

Sample ID: MB-14730		MBLK			Batch ID:	14730	Analysis Date:	12/26/2007	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-14730		LCS			Batch ID:	14730	Analysis Date:	12/26/2007	
Total Dissolved Solids	1016	mg/L	20	102	80	120			

EXHIBIT H

Qualifiers:

- | | | | |
|---|--|----|--|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike recovery outside accepted recovery limits |

PROPOSED ADVERTISEMENT

Case No. 14265:

Application of Rosetta Resources Operating LP for approval of a salt water disposal well, San Juan County, New Mexico. Applicant seeks an order amending Division Administrative Order Nos. SWD-1063 and SWD-1063-A to approve of the disposal of produced salt water into the Cliff House zone of the Mesa Verde formation into the Tsah Tah SWD Well No. 11, located 970 feet from the south line and 1510 feet from the west line of Section 11, Township 24 North, Range 10 West, NMPM. The well is located approximately 26 miles south-southeast of Bloomfield, New Mexico.