BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF ROCKCLIFF OPERATING NEW MEXICO LLC FOR APPROVAL OF A SALT WATER DISPOSAL WELL, EDDY COUNTY, NEW MEXICO. **Case No.** 15791

APPLICATION

Rockcliff Operating New Mexico LLC applies for an order approving a salt water disposal well, and in support thereof, states:

1. Applicant proposes to re-enter the South Culebra Bluff Unit Well No. 1, located 1980 feet from the north line and 1650 feet from the east line of Section 23, Township 23 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

2. The well is currently completed in the Bone Spring formation. Applicant will squeeze the Bone Spring perforations, clean out the well to 11879 feet subsurface, and convert it into a salt water disposal well with injection into the Atoka formation at depths of 11750-11879 feet subsurface.

3. A Form C-108 for the subject well is attached hereto as Attachment A.

4. The granting of this application will prevent waste and protect correlative rights.

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

Respectfully submitted,

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

Attorney for Rockcliff Operating New Mexico LLC

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

Case 15791

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance XXX Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: ROCKCLIFF OPERATING NEW MEXICO LLC

ADDRESS: 1301 McKINNEY, SUITE 1300, HOUSTON TX 77010

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? _____ Yes XXX No
If yes, give the Division order number authorizing the project: _____

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.

South Culebra Bluff Unit 1
30-015-22320
SWD;Atoka

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: Brian Wood DATE: JUNE 19, 2017

E-MAIL ADDRESS: brian@permitswest.com

* If the information required under Sections VI, VIII, X, and XI above has been pre
Please show the date and circumstances of the earlier submittal: _____

EXHIBIT A

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

Side 2

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

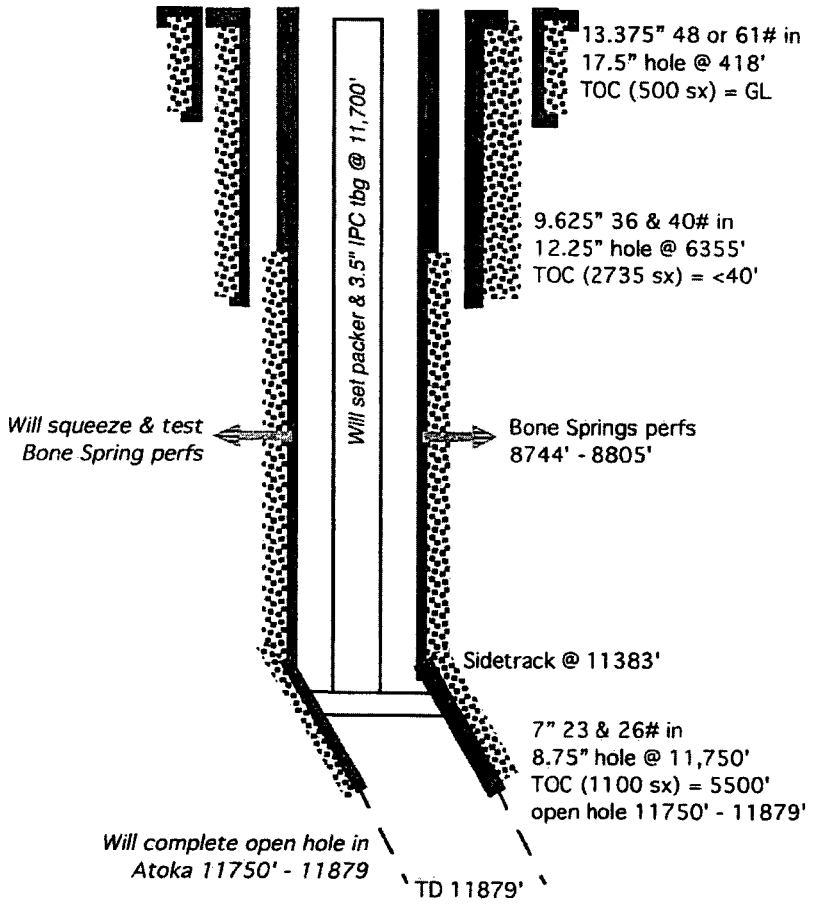
OPERATOR: ROCKCLIFF OPERATING NEW MEXICO LLC

WELL NAME & NUMBER: SOUTH CULEBRA BLUFF UNIT 1

WELL LOCATION:	G	23	23 S	28 E
1980 FNL & 1650 FEL				
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

PROPOSED



(not to scale)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13.375"

Cemented with: 500 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRC. 160 SX

Intermediate Casing

Hole Size: 12.25" Casing Size: 9.625"

Cemented with: 2705 + 30 sx. *or* _____ ft³

Top of Cement: <40' Method Determined: 1"

Production Casing

Hole Size: 8.75" Casing Size: 7"

Cemented with: 1100 sx. *or* _____ ft³

Top of Cement: 5500' Method Determined: CBL

Total Depth: 11750' (CSG), 11879' (TD)

Injection Interval

6.125" OPEN HOLE 11750 feet to 11879'

~~(Perforated~~ or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3.5" Lining Material: PLASTIC

Type of Packer: 7" X 3.5" NICKEL PLATED &/OR STAINLESS STEEL ARROWSET 1X

Packer Setting Depth: ≈11,700'

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

Additional Data

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

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

2. Name of the Injection Formation: ATOKA

3. Name of Field or Pool (if applicable): SWD;ATOKA (96169)

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. YES

   BONE SPRING IS PERFORATED FROM 8744' TO 8805' & WILL BE SQUEEZED
   ATOKA IS OH FROM 11745' TO 11879' & WILL BE AN OH DISPOSAL ZONE

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

   OVER: BRUSHY CANYON (≈4670'), BONE SPRING (6698')
   UNDER: MORROW (≈12,040')

   UNDER: NONE

I. This replaces an earlier application to convert this well to a Devonian SWD. New plan is to squeeze an existing Bone Spring oil well, clean out to 11879' (TD), and convert it to a saltwater disposal well. Proposed disposal interval will be 11750' - 11879' in the SWD; Atoka (96169). See Exhibit A for map and Form C-102. The well produced one barrel of oil and no gas in 2016 from the Culebra Bluff; Bone Spring, South Pool (15011). The Unit includes "any and all formations". The other 6 wells in the Unit are Loving; Brush Canyon, East (40350) oil wells.

II. Operator: Rockcliff Operating New Mexico LLC (OGRID 371115)
Operator phone number: (713) 351-0500
Operator address: 1301 McKinney, Suite 1300, Houston TX 77010
Contact for Application: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease name: South Culebra Bluff Unit (aka, SCBU)
Well name and number: South Culebra Bluff Unit 1
Lease Type, Size, & Area: fee (Stennis), 80 acres, and E2NE Sec. 23
Unit Size & Area: 1280 acres and W2 Sec. 13, E2 Sec. 14, E2 Sec. 23, & W2 Sec. 24; T 23 S., R. 28 E.
Location: 1980' FNL & 1650' FEL Section 23, T. 23 S., R. 28 E.

A. (2) Surface casing (13.375", 48 or 61#, K-55) was set in 1977 at 418' in a 17.5" hole and cemented to GL with 500 sacks Class C. One hundred-sixty sacks circulated.

Intermediate casing (9.625", 36 & 40#, K-55) was set at 6355' in a 12.25" hole and cemented in 2 stages to 40' with 2705 sacks. A top job with 30 sacks was then run.

Production casing (7", 23 & 26#, S-95) was set at 11750' in an 8.75" hole and cemented to 5500' (per CBL) with 1100 sacks. TD is, and will remain, 11879'.

Bone Spring will be squeezed over 3-days, fish (drill pipe) removed, and well will be completed open hole from 11750' to 11879'. See Exhibit B for current well bore diagram and detailed conversion steps.

A. (3) Tubing will be 3.5", 9.3#, L80 TSH511/EUE, IPC. Setting depth will be ≈11700'. (Disposal interval will be 11750' to 11879'.)

A. (4) A retrievable nickel-plated or stainless steel Arrowset 1-X packer will be set at ≈11700' (or ≤100' above the top of the open hole which is at 11750').

B. (1) Disposal zone will be the Atoka (SWD; Atoka (96169) pool). Estimated fracture gradient is ≈0.75 psi per foot.

B. (2) Disposal interval will be open hole from 11750' to 11879'.

B. (3) Well was spudded in 1977 as a Morrow gas well. It blew out in the Atoka and was completed as an Atoka gas well in 1978. Atoka was isolated in 2005 below a CIBP and the Bone Spring developed. Bone Spring will be squeezed (Exhibit B). Atoka will be completed open hole as a saltwater disposal well.

B. (4) Second Bone Spring is perforated from 8744' to 8805'. Atoka, completed as an open hole from 11750' to 11879', is below a CIBP set at 9500' with 20' of cement on top.

B. (5) Seventeen existing wells (Exhibit C) are in the area of review. One (30-015-22404) penetrated the Atoka (11750'). Two zones in the area of review and above the Atoka are productive. They, and their tops, are the Brushy Canyon (≈4670') and Bone Spring (6698'). One zone in the area of review and below the Atoka has been tested. That lower zone is the Morrow (≈12040'). Closest Atoka (Culebra Bluff; Atoka

South (Gas) 75740) producer (30-015-22686) is 5298' southeast in C-25-23s-28e. It last produced (24 Mcf) in May 2016.

IV. This is not an expansion of an existing injection project. It is disposal only.

V. Exhibit C shows the 17 existing wells (11 oil wells + 5 injection wells + 1 P&A well) within a half-mile radius. Exhibit D shows 151 existing wells (125 oil wells + 17 P&A + 9 injection or disposal wells) within a 2-mile radius.

Exhibits E and F shows all leases and lessors (only fee) within a half-mile radius and two-mile radius (only fee, BLM, and State leases) within each radius. Details on the leases with a half-mile are:

Aliquot Parts in Area of Review (T23S, R28E)	Lease	Working Interest Owners	Operator
SWSW Sec. 13	SCBU (Carrasco)	Rockcliff & Chevron	Rockcliff
S2SE4 Sec. 14	SCBU (Howard)	Rockcliff, Chevron, & Rash	Rockcliff
SESW Sec. 14	RGA	Rockcliff, Chevron, & Cottonwood	Chevron
E2NE4 Sec. 23	SCBU (Stennis)	Rockcliff & Chevron	Rockcliff
NWNE Sec. 23	SCBU (Reid)	Rockcliff & Chevron	Rockcliff
NW4 Sec. 23	South Culebra Bluff	Rockcliff & Chevron	Rockcliff
SWNE Sec. 23	SCBU (Donaldson)	Rockcliff & Chevron	Rockcliff
N2SE4 Sec. 23	SCBU (Claiborne)	Rockcliff & Chevron	Rockcliff
N2SW4 & SESW Sec. 23	South Culebra Bluff	Rockcliff & Chevron	Rockcliff
S2SE4 Sec. 23	SCBU (Williams)	Rockcliff & Chevron	Rockcliff
W2NW4 Sec. 24	SCBU (Carrasco)	Rockcliff & Chevron	Rockcliff
W2SW4 Sec. 24	SCBU (Claiborne)	Chevron, Kerr-McGee, Featherstone	Rockcliff & Kaiser-Francis

VI. One well (30-015-22404) within ½ mile penetrated the Atoka (top = 11660'). The 13213' deep well unsuccessfully tested the Morrow. It was then plugged back and produced from the Atoka from 1978-1990. It has now been plugged back a second time and produces from the Brushy Canyon.

VII. 1. Average injection rate will be ≈10000 bwpd.
Maximum injection rate will be 20000 bwpd.
2. System will be open and closed. Some water will be trucked and some will be piped.
3. Average injection pressure will be ≈2000 psi.
Maximum will be 2350 psi (= 0.2 psi/foot x 11750' (top of open hole)).
4. Main source of disposal water will be water produced from the Brushy Canyon, Bone Spring, and Wolfcamp. However, water produced from other Permian Basin zones (e. g., Avalon, Atoka, Morrow) could also be disposed. There are no known compatibility issues. Go-Tech analyses from a half dozen formations in 23s-28e and 23s-29e are in Exhibit G.
5. Two Atoka water samples (Exhibit G) were collected at a well (30-015-22686) 5298' southeast. TDS ranged from 217,050 to 236,539 mg/L. Chlorides ranged from 128,000 mg/L to 138,000 mg/L.

VIII. The Atoka (≥219' thick) is composed of limestone, shale and sandstone. Main focus will be the Upper Atoka C. It is 26' thick sandstone with an average density porosity of 14% (LS scale). More details on the geology are in Exhibit H. Closest possible underground source of drinking water above the proposed disposal interval are the several hundred feet thick red beds near the surface. Deepest water well within a 2-mile radius is 360'. No underground source of drinking water is below the proposed disposal zone.

Five different Atoka top depths are in NMOCD files. Rockcliff Senior Geologist Dan Block calculates Atoka top is 11660'. See exhibit I for his conclusion. Estimated formation tops are:

Quaternary = 0'
Red bed = 300'
Anhydrite = 672'
Delaware sand = 2650'
Delaware Mt. Group = 2705'
Bone Spring = 6224'
Wolfcamp = 9558'
Penn = 11052'
Canyon 11195'
Strawn = 11427'
Atoka = 11660'
Proposed disposal interval = 11750' - 11879'
Current TD *& Proposed* = 11789'

State Engineer records (Exhibit J) show 16 water wells within a 1-mile radius. There will be >2-miles of vertical separation, including multiple layers of salt, anhydrite, and shale between the bottom of the only likely underground water source (red beds) and the top of the Atoka.

IX. The well will be stimulated with ≈2800 gallons 15% HCl if needed.

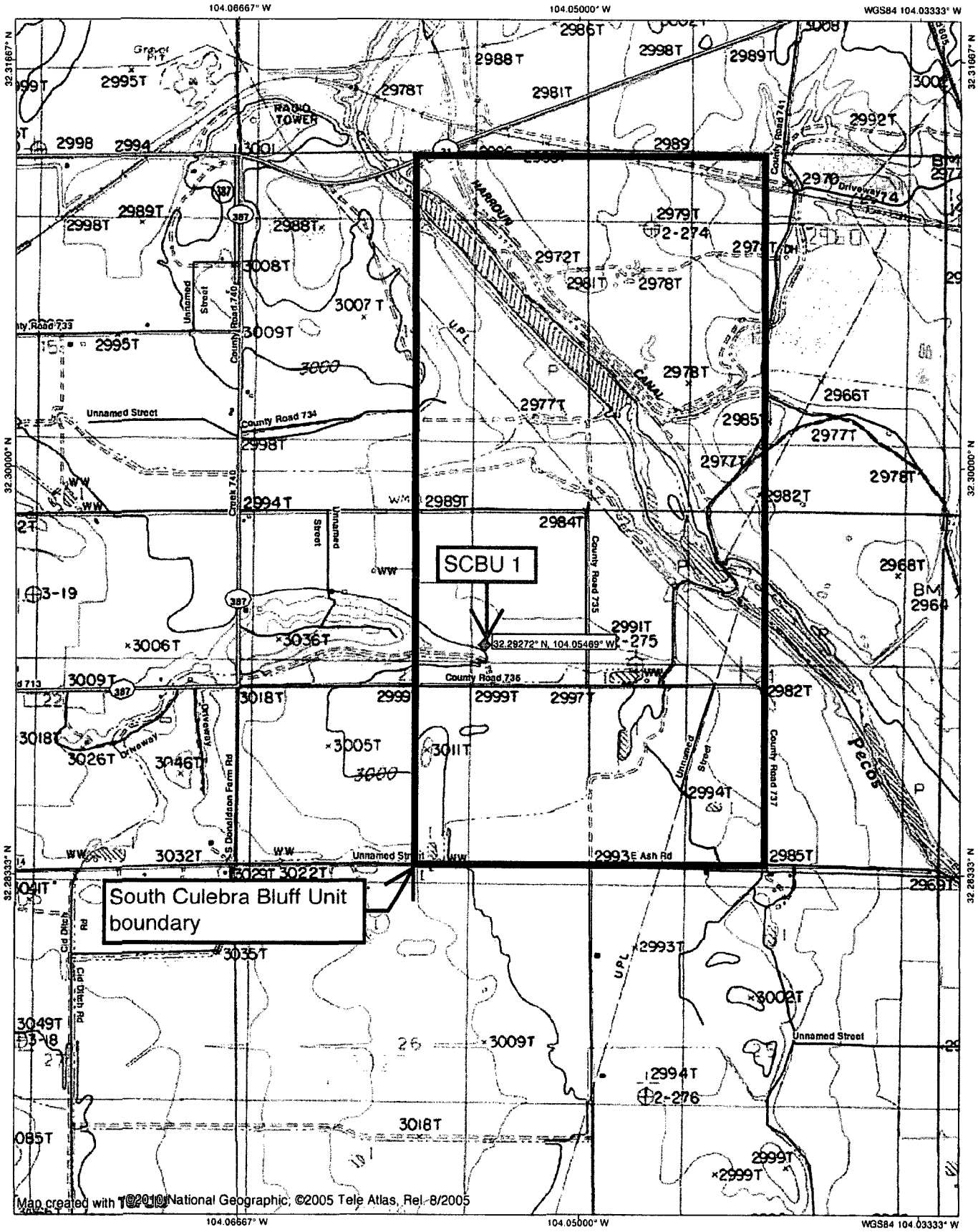
X. Computer processed, dual laterolog/micro laterolog/GR, compensated Z-densilog/compensated neutron/GR, borehole compensated sonic, and CBL logs were run and are on file with NMOCD.

XI. State Engineer records indicate 16 water wells are within a mile radius. Samples were collected from 2 water wells within a half-mile in March 2017. Their analyses are in Exhibit K.

XII. Closest Quaternary fault (Guadalupe) is ≈56 miles southwest (Exhibit L). Rockcliff Operating New Mexico LLC is not aware of any geologic or engineering data that may indicate the Atoka is in hydrologic connection with any underground sources of water. Hundreds of feet of evaporites and shale prevent that from occurring. Deepest water well within a 2-mile radius is 360' (Exhibit J). There are 14 active Atoka injection wells in New Mexico.

XIII. A legal ad (see Exhibit M) was published on May 13, 2017. Notice (this application) has been sent (Exhibit N) to the surface owners (Johnny & Jackie Reid), working interest owners (Chevron, Cottonwood, Featherstone, Kerr-McGee, Rash), and non-Rockcliff operators (Chevron and Kaiser-Francis) within a half-mile.

TOPO! map printed on 01/20/17 from "Untitled.tpo"



NATIONAL GEOGRAPHIC

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km

EXHIBIT A

TN ↑ MN
7°
01/20/17

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Amoco Production Company	~~A. R.~~ Donaldson	1

Unit Letter	Section	Township	Range	County
G	23	23 South	28 East	Eddy

Actual Footage Location of Well:
1980 feet from the North line and 1650 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
2995.5	MORROW	WILDCAT	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

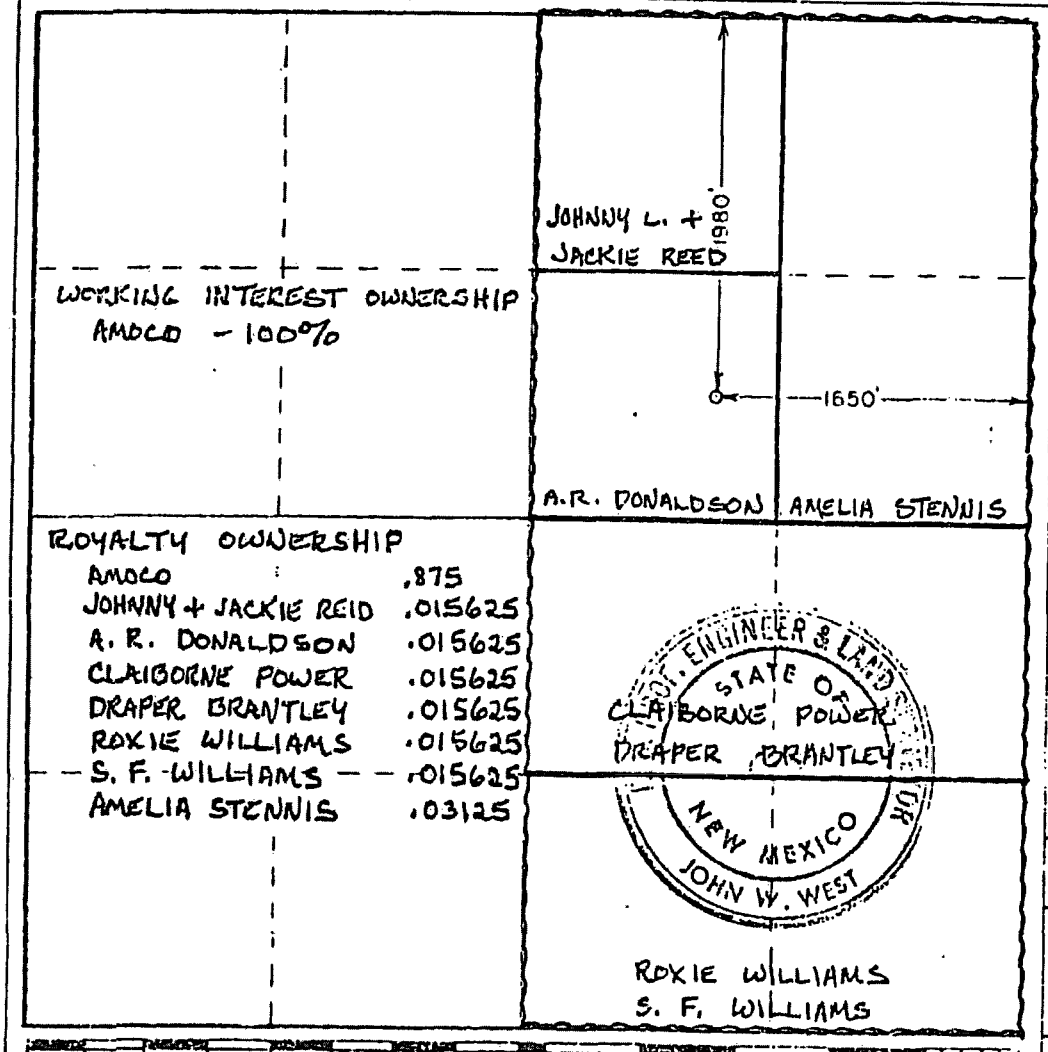
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? Amoco owns 100% of all leases.

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name: Randy Atkins
Position: STAFF ASSISTANT (SG)
Company: AMOCO PRODUCTION CO.
Date: 10-17-77

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 knowledge and belief.

Date Surveyed: September 26, 1977

Registered Professional Engineer and/or Land Surveyor: John W. West

Certificate No. 676

EXHIBIT A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

X AMENDED REPORT
(change from Devonian SWD)

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	2	3
30-015-22320	96169	SWD; Atoka

4	5	6
316160	South Culebra Bluff Unit	1

7	8	9
371115	Rockcliff Operating New Mexico LLC	2995'

10 Surface Location

G	23	23 S	28 E	Lot Idn	1980	North	1650	East	Eddy County

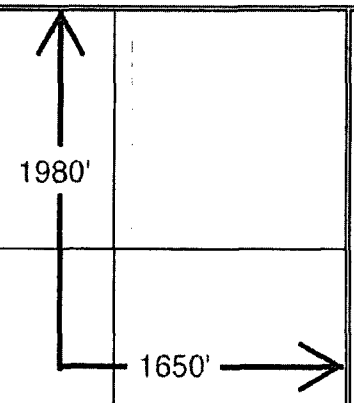
11 Bottom Hole Location If Different From Surface

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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

5-13-17
Signature Date

Brian Wood
Printed Name

brian@permitswest.com
E-mail Address

(505) 466-8120

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.

9-26-77
Date of Survey

Signature and Seal of Professional Surveyor:

Original survey by
John West
attached

Certificate Number

SCBU #1

(Original Wellbore)

Original Spud Date - 11/01/1977

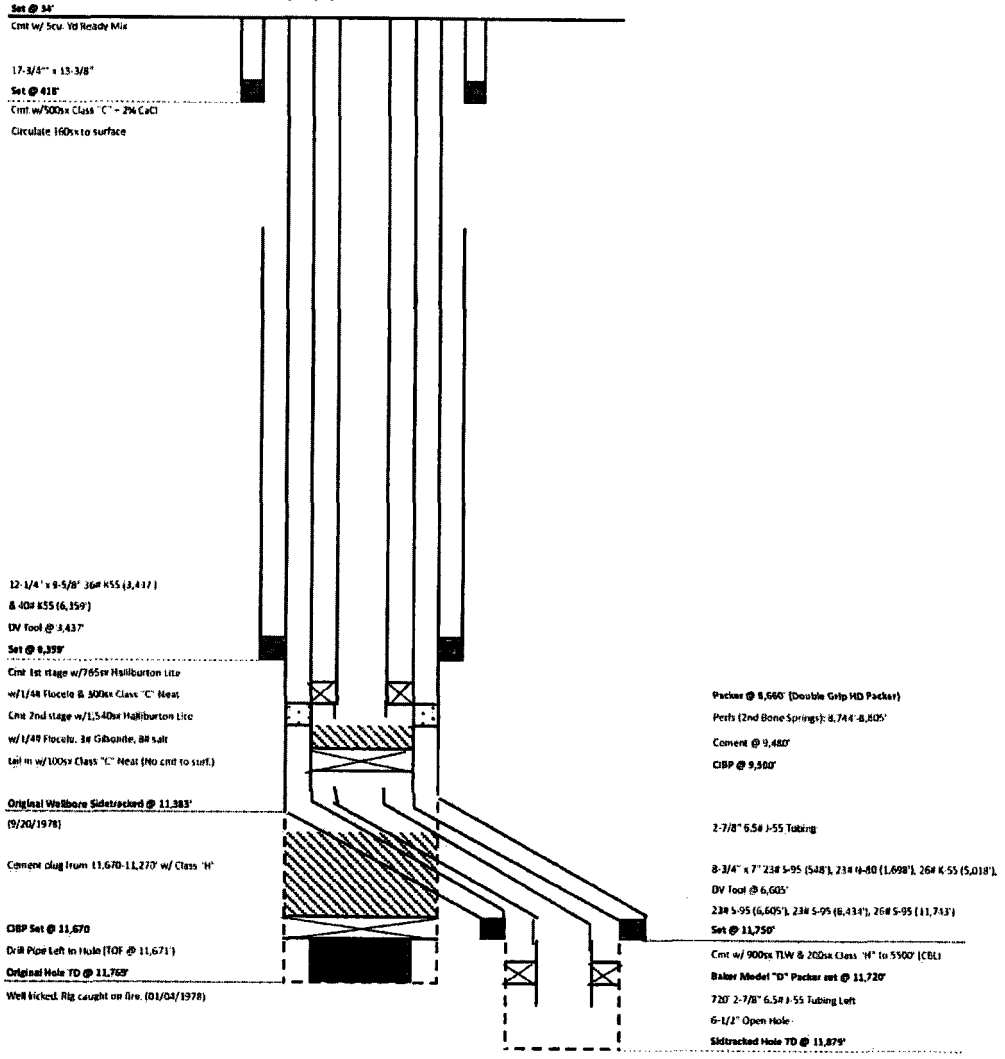


EXHIBIT B

SCB #1B SWD: Convert Well to Injection in the Atoka Formation

Note: Ensure well is secured prior to SDFN.

Day 1: MIRU. Unseat pump, POOH, and lay down pump and rods.

Day 2: ND WH and NU BOP. Unseat tubing anchor. POOH laying down 2 7/8" tubing.

Day 3: Run in hole with bit and scraper on 2 7/8" PH6 work string. Begin reverse circulation at 8,744' and clean through perforations to CIBP at 9,480'. Scraper should be positioned to remain above perforations at TD. POOH. Pick up RTTS and RIH to 3000'.

Day 4: Continue RIH with RTTS to 8,700'. Set RTTS and test tubing by casing annulus to 600 psi for 30 minutes. Release RTTS and POOH. RIH open ended to 3000'.

Day 5: RIH open ended and tag top of CIBP at 9,480'. Pick up 5'. Rig up cementers and pump balanced plug with 38 bbls of 16.4ppg cement. Pull above cement plug to 8,300'. Reverse circulate two BU to ensure annulus is clear of cement. Shut well in and begin hesitation squeeze to achieve 700 psi final pressure. Shut in well with final pressure and WOC.

Day 6: WOC.

Day 7: POOH. Pick up bit. RIH and drill cement to bottom of perforations. Test squeezed perforations to 600psi for 30 min. Drill cement and CIBP. CBU. RIH to top of fish, tagging to verify depth. Begin POOH.

Day 8: Finish POOH. Pick up wide catch overshot, spiral grapple, and packoff assembly with fishing jars. RIH and catch top of 2 7/8" tubing. Pump into fish to establish communication through tubing. Rig up wireline. RIH with 2 1/8" gage ring assembly to top of packer at approximately 11,720'. POOH. RIH with 2 1/8" chemical cutter to top of packer. Make cut. RD wireline. Pick up to ensure fish is free.

Day 9: POOH and LD 2 7/8" tubing fish. Pick up fixed blade packer mill. If not able to make cut past F nipple, ensure spear will pass 2 1/4", or is carbide dressed. RIH to top of packer.

Day 10: Begin milling operations. Mill through packer slips. POOH to retrieve packer.

Day 12: TIH 6 1/8" bit and scraper to 7" shoe at 11,745'. POOH and LD bit and scraper.

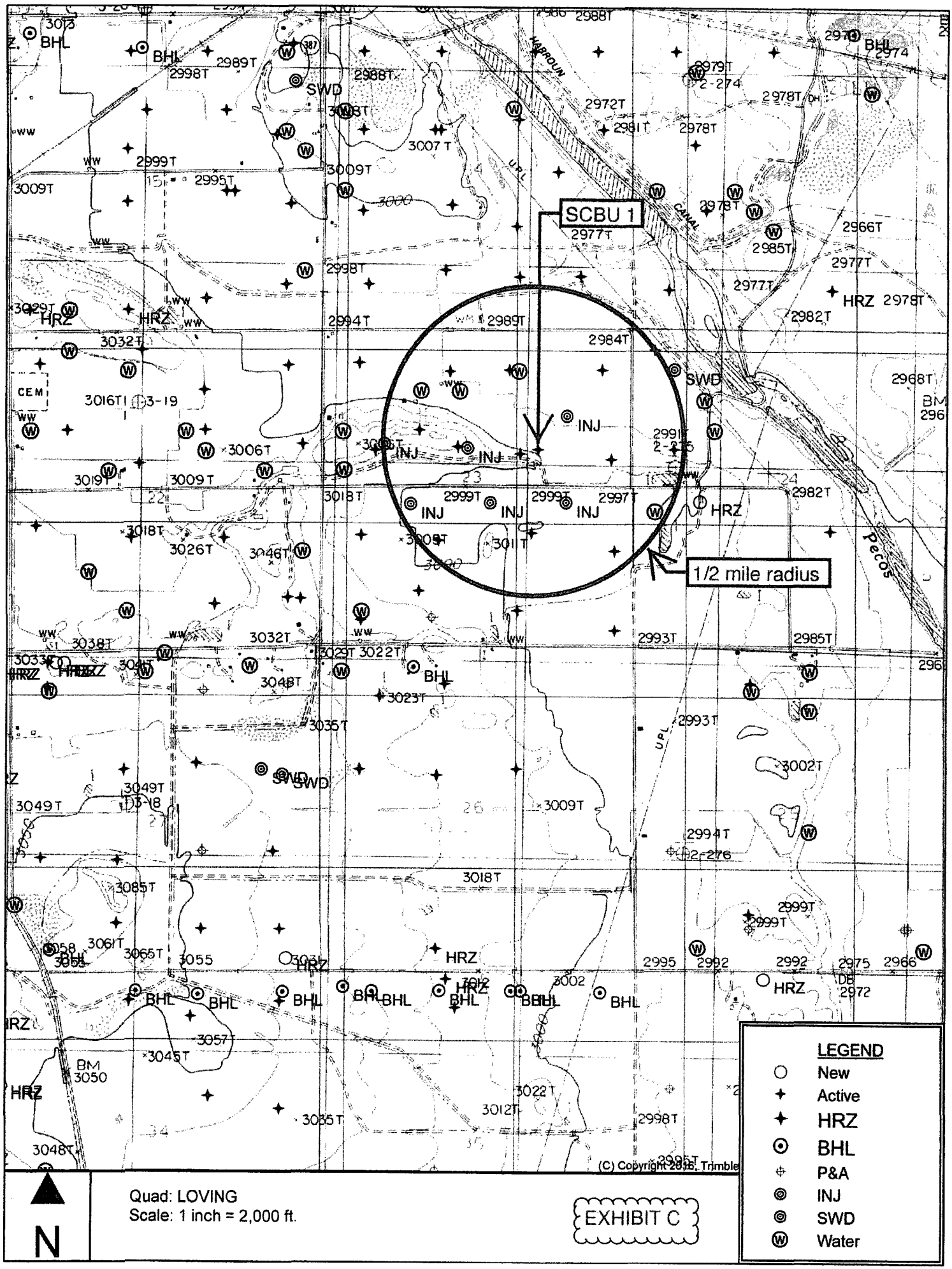
Day 13: Rig up wireline. Make a 6 1/8" gage ring run to 11,700'. POOH. Pick up RTTS. TIH to 11,700'. Test casing to 600psi for 30min. POOH and LD RTTS.

Day 14: TIH with 6" steel tooth bit and BHA. Clean out open hole down to 11,876', with reverse circulation if necessary. Spot 2800 gallons of 15% HCL at 11,876'. Pull 120' above top of acid pill. Shut in well and establish injection rate down kill line up to 500psi. Repeat acid treatment if necessary. Open well. Begin POOH.

Day 15: Continue POOH to LD bit and motor. Make up Arrowset 1X packer and on-off tool on 3 ½ EUE internally coated tubing. RIH at 60 fpm to land packer at 11,700' MD. Set packer. ND BOP and install wellhead assembly. Release rig.

Day 16: Turn well over to production for MIT.

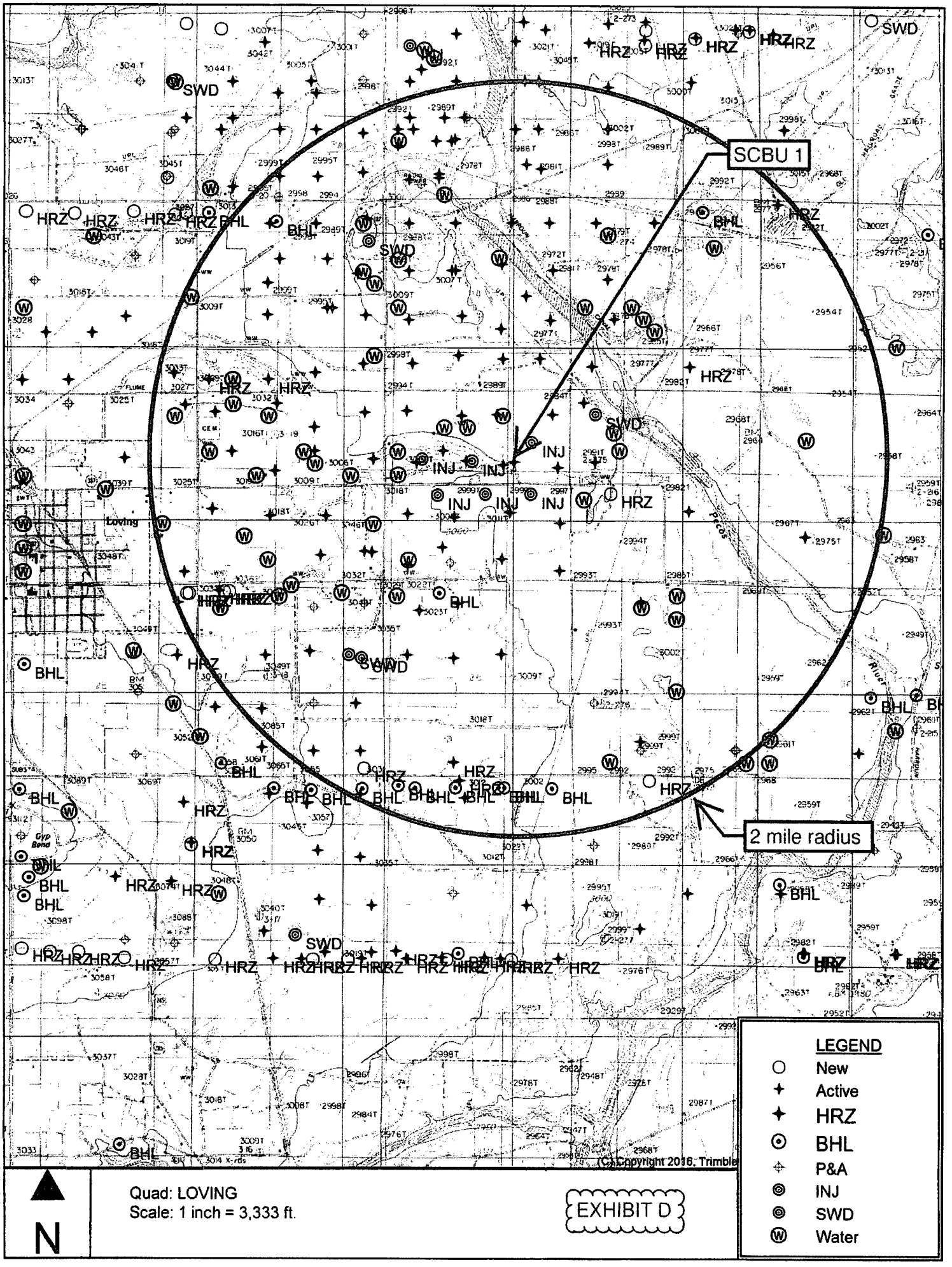
EXHIBIT B


SCBU 1
1/2 mile radius
Pecos
CANAL
ARROYO
UPL
CEM
3-19
2-274
2-276
LEGEND
New
Active
HRZ
BHL
P&A
INJ
SWD
Water
N
Quad: LOVING
Scale: 1 inch = 2,000 ft.
EXHIBIT C
(C) Copyright 2015. Trimble

WELLS WITHIN (2640') OR NEAR AREA OF REVIEW

API	OPERATOR	WELL	TYPE	UNIT-SECTION	TVD	ZONE	FEET FROM SCBU 1
3001522700	Rockcliff	South Culebra Bluff Unit 003	O	G-23	8000	Loving; Brushy Canyon; E	310
3001533783	Rockcliff	South Culebra Bluff 23 015	I	H-23	6424	Loving; Brushy Canyon; E	748
3001535514	Rockcliff	South Culebra Bluff 23 021	I	I-23	6329	Loving; Brushy Canyon; E	941
3001535513	Rockcliff	South Culebra Bluff 23 020	I	J-23	6350	Loving; Brushy Canyon; E	1191
3001535512	Rockcliff	South Culebra Bluff 23 019	I	F-23	6400	Loving; Brushy Canyon; E	1229
3001526368	Rockcliff	South Culebra Bluff 23 012	O	H-23	6350	Loving; Brushy Canyon; E	1265
3001522404	Rockcliff	Donaldson Com A 001	O	F-23	13213	Loving; Brushy Canyon; E	1349
3001526348	Rockcliff	South Culebra Bluff 23 007	O	J-23	6300	Loving; Brushy Canyon; E	1395
3001526346	Rockcliff	South Culebra Bluff 23 011	O	B-23	6300	Loving; Brushy Canyon; E	1404
3001522931	Rockcliff	South Culebra Bluff Unit 004	O	A-23	9802	Loving; Brushy Canyon; E	1723
3001526295	Rockcliff	South Culebra Bluff 23 006	O	C-23	6300	Loving; Brushy Canyon; E	1964
3001530164	Rockcliff	South Culebra Bluff 23 013	O	F-23	6350	Loving; Brushy Canyon; E	2028
3001533605	Rockcliff	South Culebra Bluff 23 008	O	I-23	6424	Loving; Brushy Canyon; E	2140
3001525841	Rockcliff	South Culebra Bluff 23 001	O	K-23	6560	Loving; Brushy Canyon; E	2263
3001523339	Rockcliff	South Culebra Bluff Unit 006	O	E-24	9506	Loving; Brushy Canyon; E	2321
3001535510	Rockcliff	South Culebra Bluff 23 017	I	K-23	6350	Loving; Brushy Canyon; E	2370
3001533608	Rockcliff	Candelario 24 002	O	D-24	6400	Loving; Brushy Canyon; E	2596
3001535511	Rockcliff	South Culebra Bluff 23 018	I	E-23	6470	Loving; Brushy Canyon; E	2654

EXHIBIT C


SCBU 1
2 mile radius
Loving
Pecos
River
INJ
SWD
HRZ
BHL
LEGEND
New
Active
HRZ
BHL
P&A
INJ
SWD
Water
N
Quad: LOVING
Scale: 1 inch = 3,333 ft.
EXHIBIT D
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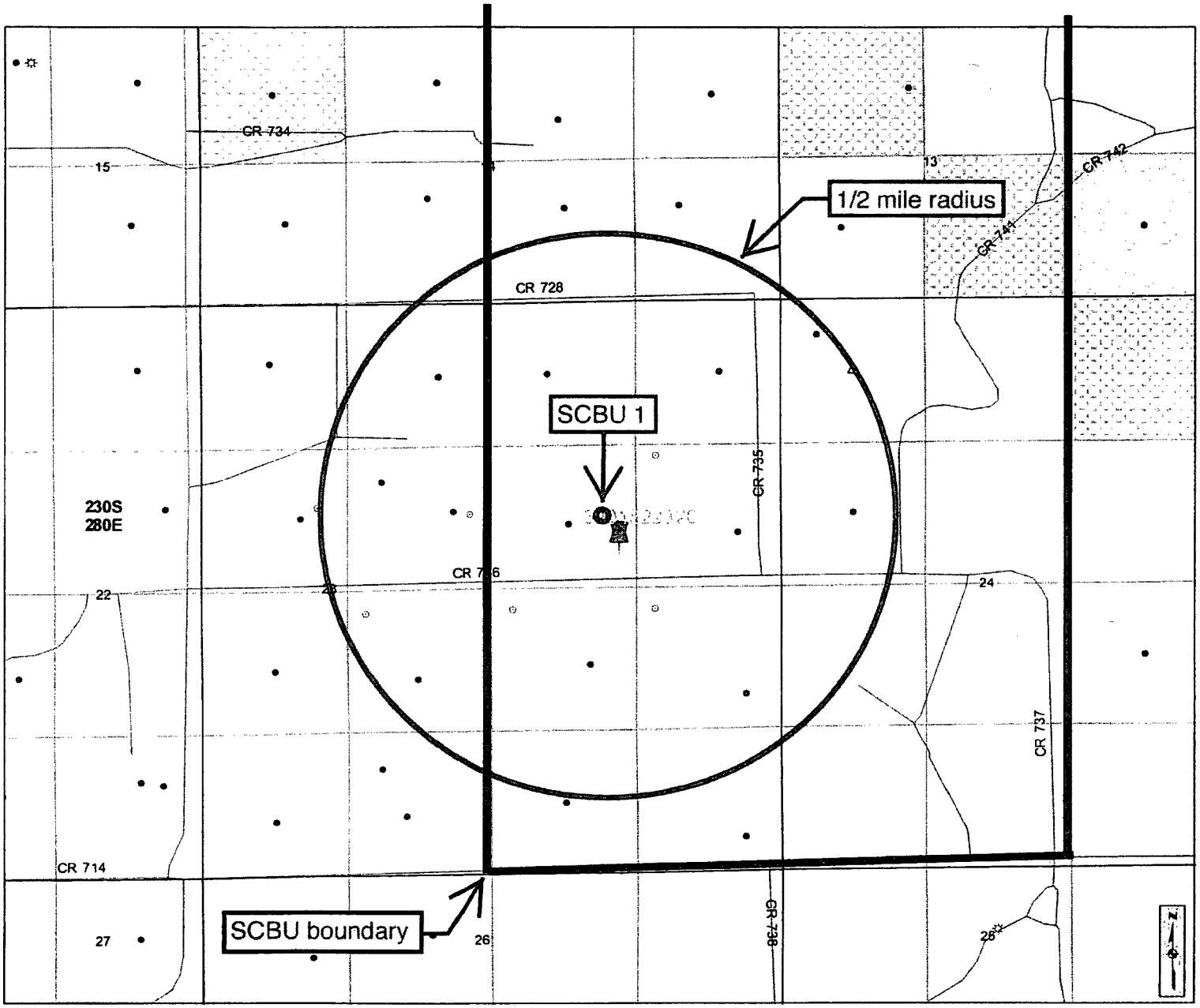


Cartographic Features
- County Boundaries
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- Interstate
- US Hwy
- NM Hwy
- Local Road
- Continental Divide

Federal Minerals Ownership
- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands
- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases
- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

Oil and Gas Related Features
- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P Potash Enclave Outline

NMOCD Oil and Gas Wells
- CO^2
- Gas
- Injection
- Miscellaneous
- Oil
- Salt Water Disposal
- Water
- DA or PA

New Mexico State Land Office
Oil, Gas and Minerals

0 0.05 0.1 0.2 0.3 0.4
Miles

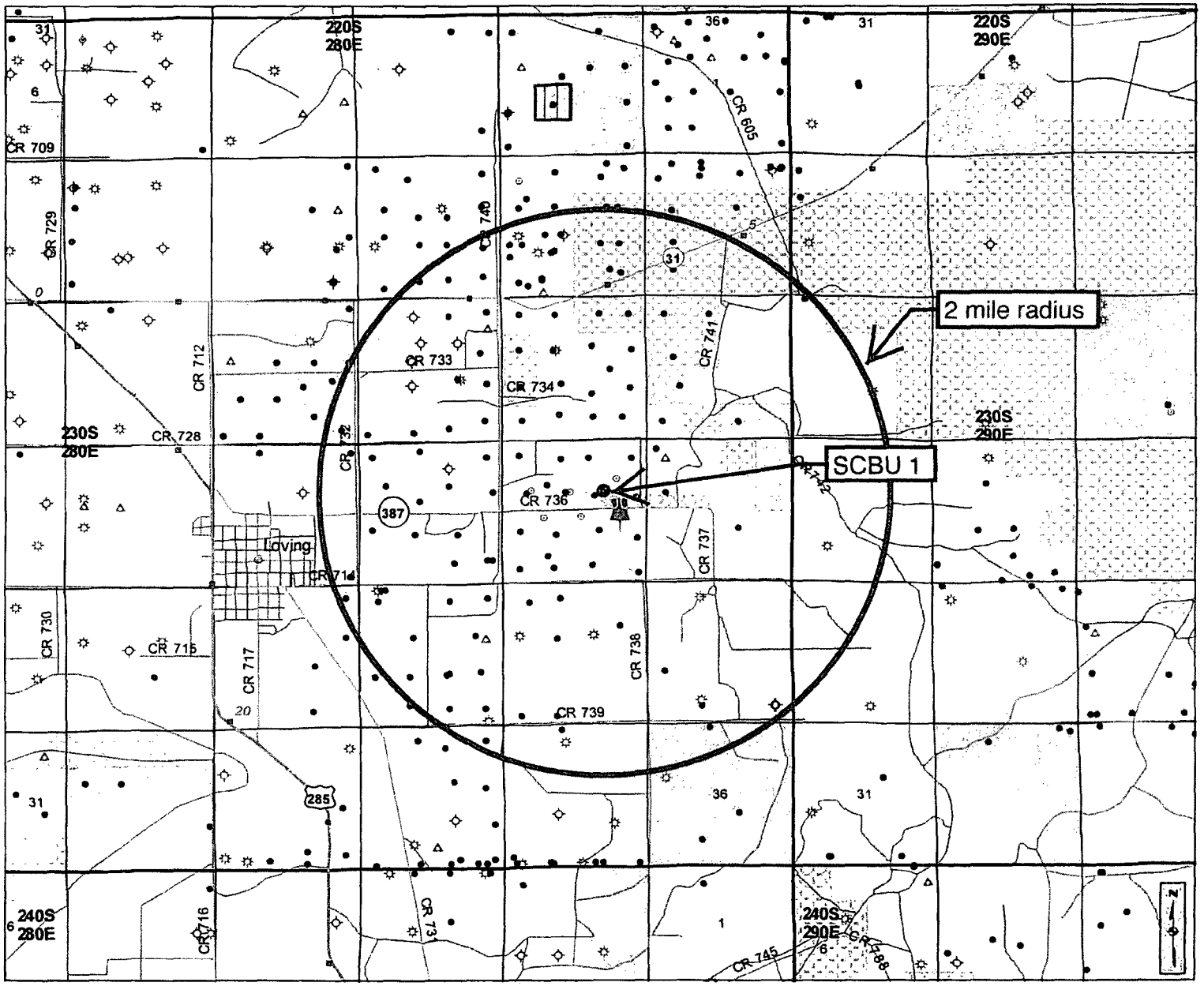
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

Land Office Geographic Information Center
logic@slo.state.nm.us

Created On: 1/20/2017 10:46:05 AM

EXHIBIT E

www.nmstatelands.org



New Mexico State Land Office

Oil, Gas and Minerals

0 0.2 0.4 0.8 1.2 1.6 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

Land Office Geographic Information Center
logic@slo.state.nm.us

Created On: 1/20/2017 10:48:30 AM

EXHIBIT F

www.nmstatelands.org

api	section	township	range	formation	tds mgL	sodium mgL	calcium mgL	iron mgL	Mg mgL	chloride mgL	HCO3 mgL	sulfate mgL
3001522686	25	23S	28E	ATOKA	217050					128000	1030	3300
3001522686	25	23S	28E	ATOKA	236539					138000	2370	3950
3001538059	16	23S	29E	AVALON UPPER	154164	54960	798	35	203	92021	3660	0
3001538059	16	23S	29E	AVALON UPPER	154965	58687	719	54	131	91118	1671	1502
3001503691	24	23S	29E	BONE SPRING	271010					168800	130	100
3001541150	16	23S	29E	BONE SPRING 1ST SAND	146425	55118	1445	11	313	84786	2660	0
3001541148	16	23S	29E	BONE SPRING 1ST SAND	152943	54184	1409	16	275	92807	2306	0
3001541149	16	23S	29E	BONE SPRING 1ST SAND	153042	53896	1294	0	273	92918	2708	0
3001540038	16	23S	29E	BONE SPRING 1ST SAND	153751	57591	1198	10	244	91697	952	755
3001522595	5	23S	28E	DELAWARE	133440					80500	303	2100
3001524589	21	23S	28E	DELAWARE	202807	60819	20578	3	4029	143136	39	214
3001527173	34	23S	28E	BRUSHY CANYON	101919	34645	5773	33	1198	67290	41	229
3001535073	22	23S	29E	BRUSHY CANYON	108093	72995	26487	284	4547			
3001526293	14	23S	28E	BRUSHY CANYON	203960	69638	23562	77		148750	537	149
3001526891	3	23S	28E	BRUSHY CANYON	228167	81632	23470	36		167300	73	149
api	section	township	range	formation	tds mgL	sodium mgL	calcium mgL	iron mgL	Mg mgL	chloride mgL	HCO3 mgL	sulfate mgL

EXHIBIT G

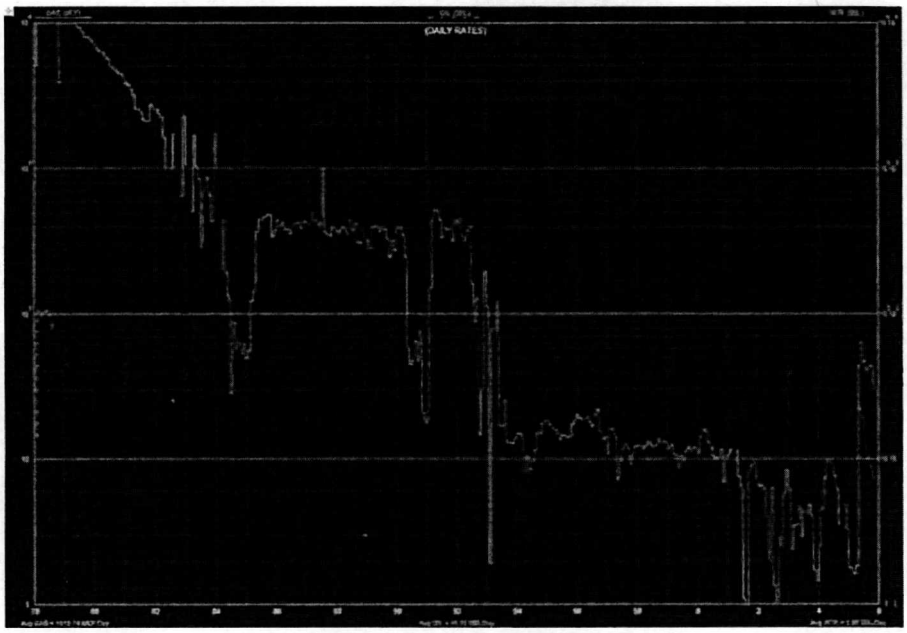
3001526540	11	23S	28E	BRUSHY CANYON	244866	91561	21510	102		179250	73	120
3001527173	34	23S	28E	BRUSHY CANYON	255443	113016	2128	592	302	179189	913	1477
3001536078	16	23S	29E	BRUSHY CANYON	273399	77650	20696	44	3301	168200	85	454
3001537371	22	23S	29E	BRUSHY CANYON	279275	78992	21728	25	3407	172189	183	177
3001526527	11	23S	28E	BRUSHY CANYON	283902	77440	39540	37	6397	211161	73	243
3001536738	22	23S	29E	BRUSHY CANYON	288731	69567	31996	59	4781	179021	122	0
3001536738	22	23S	29E	BRUSHY CANYON	292239	69172	31472	52	4557	183597	122	0
3001536461	22	23S	29E	BRUSHY CANYON	292358	68893	31112	55	4509	184250	244	0
3001536738	22	23S	29E	BRUSHY CANYON	294876	71940	32645	53	4970	181883	61	0
3001540827	31	23S	29E	BRUSHY CANYON	295110	76800	28512	60	4245	181795	73	0
3001541963	31	23S	29E	BRUSHY CANYON	296788	80278	29889	65	4475	178388	73	0
3001526527	11	23S	28E	BRUSHY CANYON	297557	90602	35089	63	4688	218632	50	619
3001536461	22	23S	29E	BRUSHY CANYON	297620	71507	31763	61	4691	186000	188	0
3001540826	31	23S	29E	BRUSHY CANYON	297841	79092	29745	70	4417	180802	85	0
3001536078	16	23S	29E	BRUSHY CANYON	298475	74542	32308	52	4723	182394	25	3
3001536461	22	23S	29E	BRUSHY CANYON	302545	72865	32249	56	4837	188800	37	0
api	section	township	range	formation	tds mgL	sodium mgL	calcium mgL	iron mgL	Mg mgL	chloride mgL	HCO3 mgL	sulfate mgL
3001536078	16	23S	29E	BRUSHY CANYON	303155	76908	33274	62	4821	183875	610	0

EXHIBIT G

3001535073	22	23S	29E	BRUSHY CANYON	303550	80233	27451	49	4197	187467	104	331
3001526496	11	23S	28E	BRUSHY CANYON	307701	96917	34318	47	5393	228593	26	505
3001503691	24	23S	29E	DEVONIAN	56922					29000	1740	4980
3001503691	24	23S	29E	DEVONIAN	64582					37500	610	1700
3001522886	8	23S	28E	MORROW	6804	2064	329	154	39	3939	56	209
3001522886	8	23S	28E	MORROW	7360	1292	422	1059	56	4158	304	8
3001522886	8	23S	28E	MORROW	27040	8664	1173	553	129	16624	40	147
3001522553	17	23S	29E	MORROW	62523					37600	142	810
3001522677	22	23S	28E	MORROW	278468					166000	78	3400

EXHIBIT G

Rockcliff Energy is requesting the right to dispose produced water from various Wolfcamp and Bone Spring formations into the Atoka Formation by converting South Culebra Bluff #1 (SCB #1) to a non-commercial disposal well. The SCB #1 was originally drilled and completed in the Atoka Fm in December 1977 and produced 15.03 Bcf of gas from January 1978 through November 2005 (see graph below).



This well has produced less than 2,000 bbls of water, showing that the productive interval is "gas-wet" and should allow for 80-85% recovery factors against the original gas in place (OGIP). The main target of the open hole completion is the informally named Upper Atoka "C" sand which is 26 feet thick with an average density porosity of 14% (LS scale). While the open hole perforations extend into the Lower Atoka, covering a total of 129 ft, no other interval is considered productive as porosity below the "C" sand does not exceed 8% (see orange highlights in the log below). The Atoka Fm is being considered for saltwater disposal as the overlying Strawn and Wolfcamp formations are both prospective for hydrocarbons in this area.

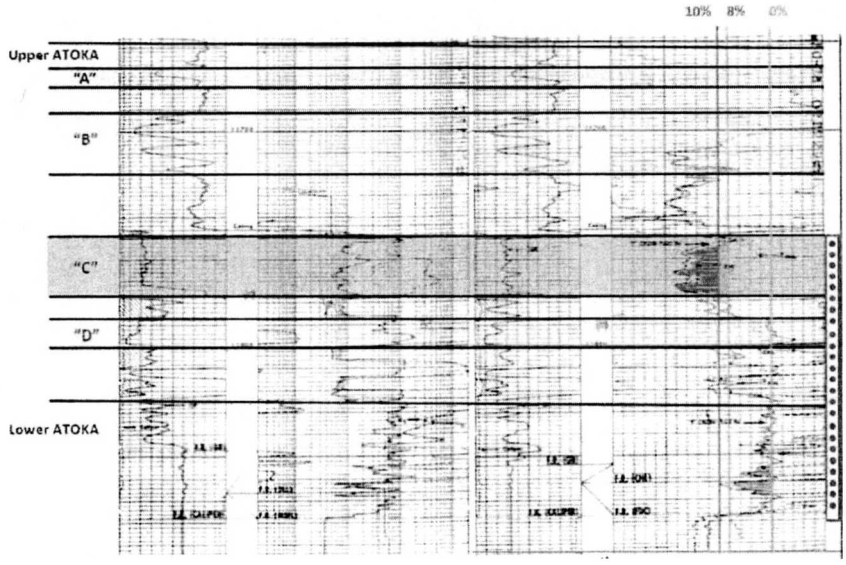
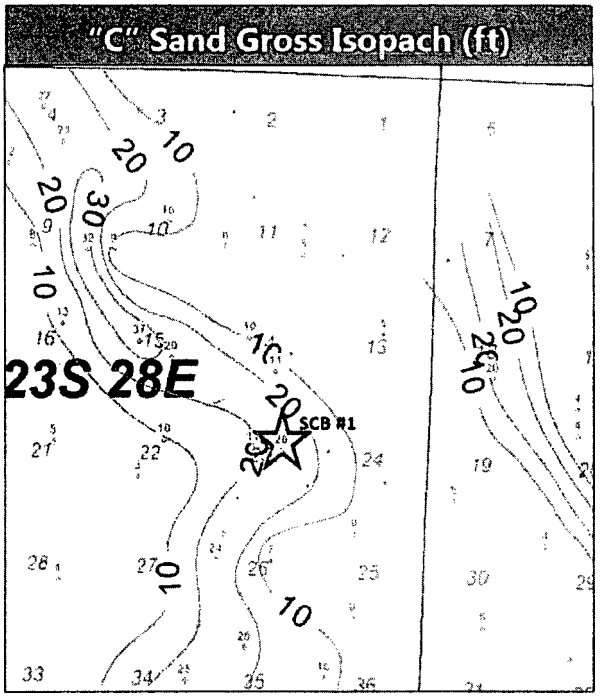
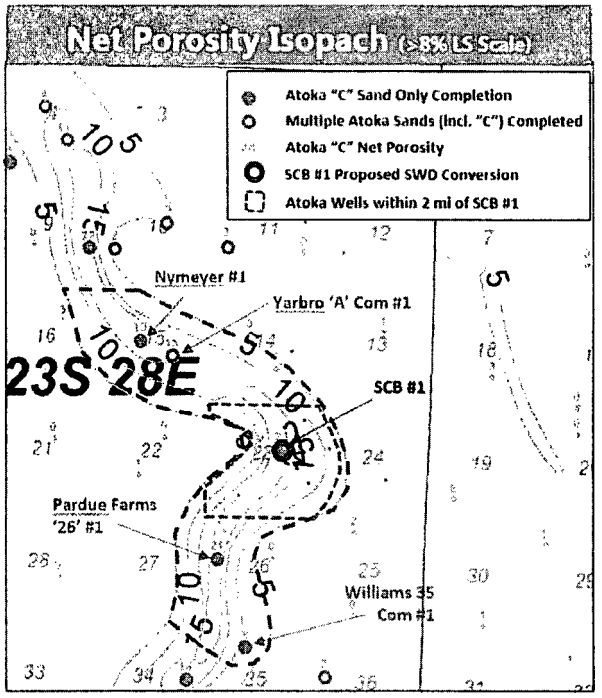


EXHIBIT H

The Upper Atoka "C" Sand maps as a channel deposited from north to south along a SSE trend through township 23S-28E (see "C" Sand Gross Isopach and Net Porosity Isopach maps below). As many as 14 wells, including the SCB #1, have perforations in the "C" Sand, though seven of those are commingled with other Atoka sands ("A", "B" or "D").





Upon examination, the five nearest Atoka wells within the channel appear to have effectively drained the reservoir around SCB #1 (see Volumetrics discussion below). Having been completed a full year prior to the second well in the channel, the SCB #1 produced over two times the amount of gas than the Pardue Farms '26' #1, which is in similar rock and only 1.2 miles away. Follow up wells extending the South Culebra Bluff Field to the northwest and south similarly produced less gas (See Table 1 below). One well, the Nymeyer #1 looks to be continuing production on a periodic, monthly basis, averaging less than 2 Mcf/d since 2004 (see Table 2 below). This, coupled with the lower overall cumulative gas captured from the nearby wells, convinces Rockcliff that the reservoir has been depleted.

Table 1

Well Name	Producing Zone	On Prod Date	Cum Gas (Bcf)	Last Month Prod	Distance from SCB #1
SCB #1	"C"	Jan-78	15.0	Nov-17	n/a
Pardue Farms '26' #1	"C"	Jan-79	7.1	May-17	1.2 mi
YARBRO 'A' COM #1	"B" & "C"	May-84	0.7	Dec-94	1.3 mi
Nymeyer #1	"C"	Nov-81	5.1	0.3 Mcf/d	1.6 mi
Williams 35 Com #1	"C"	Mar-79	4.2	Oct-95	1.8 mi

Table 2

Wsn:12968 WELL: 30-015-23675-0000 (NYMEYER #1)

Summary Rpt | Print Table... | Help | Close

View: Use Last View / Use Default View | Save Default View

Col Wd 80 | 0=NULL | Locked | Active Only | Column View | Show Prior Cum

Years Displayed: Start Year 1977 | End Year 2017 | Display Data Range | Display Custom Range

GAS - Produced Gas (MCF)

GAS

Right Click Mouse for Additional Options

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1978												
1979												
1980												
1981											94171	102446
1982	94692	84474	90368	72581	67477	44061	71258	73962	62871	2451	30191	67183
1983	72400	16147	21089	55592	94453	47475	48906	42280	21195	50726	30127	69072
1984	81043	13553	4581	110373	53639	70948	86306	79213	92792	91188	89734	91663
1985	89617	76336	51446	67918	51001	48945	71284	66105	59092	58243	31741	55967
1986	51420	43867	27499	25384	47560	21397	404	23612	43085	43085	6382	29095
1987	41775	17403	29356	15782	27959	26854	16665	21424	20771	19983	18355	17544
1988	17556	16611	12479								1760	1560
1989	1444		16515	15972	16563	17497	20734	19858	18321	18766	18179	19138
1990	17579	25396	26101	23999	23237	19823	20077	18373	18068	19436	16962	17672
1991	17969	16169	17244	15300	14801	16873	17217	16706	15747	13615	15233	13492
1992	14188	12099	12099	11856	13318	12313	11910	12006	12070	11265	11526	11547
1993	11369	10611	10795	11014	10641	9913	8642	10276	7566	6998	3297	1204
1994	3346	2159	2557	2818	1943	4673	6624	6936	7127	7108	6665	5787
1995	5739	5365	5401	5875	5058	5764	4085	6709	5848	6904	6043	5321
1996	5473	4112	4155	3868	5545	4494	3505	3447	3668	2891	4424	4796
1997	5151	6334	3969	3246	4898	2747	3974	4710	4488	4743	2109	1911
1998	6723	6353	7281	7167	5245	4984	3348	5829	5734	8005	7974	6367
1999	6335	5319	6126	5949	6066	5833	6024	5710	5949	6177	6031	6585
2000	5889	4928	5012	6656	6180	5611				5639	5576	5539
2001	5116	4799	5022	4771	7469	6489	5806	3955				
2002							692	393	9	44		
2003		8										
2004	2	8	4	7	5	7	2			4	11	5
2005	10	5	5	9		5	5	8	5	9	6	8
2006	6	12	7								6	7
2007	61	38	2	11	14	15	14	9	11	12		
2008		8		11	8	9	9	9	10	9	11	7
2009	7	7	9	35	46	10	7	9	7	10	6	3
2010	70	35	22	17	11	12	6	8	8	7	8	5
2011	8	11	10	7	7	13	11	8	7	10	8	9
2012	6	11	3	8	8	8	9	7	5	7	8	2
2013	22	6	5	6	1	1	4	7	6	5	27	11
2014	7	8	23	7	6	14	10	15	17	10	7	17
2015	20	20	15	21	16	15	11	30	8	12	17	17
2016	3	14	17	26	24	16	5	35	10	13	19	23
2017	9											

Imperial | Metric | Show Total 5,146,836.000 | Save Template... | Load Template...

Volumetrics

Reservoir volumes were calculated for two distinct areas within the channel. The Blue dashed polygon on the Net Porosity Isopach map above is restricted to a two mile radius inside the 5 foot contour and captures the five nearest Atoka producers discussed above. The second area equates to 640 acres within the channel immediately surrounding the SCB #1. The former is used to show how effectively the five aforementioned wells have drained the reservoir, while the latter is used to consider how much water can be safely injected into the SCB #1 well. Volumetrics were calculated according to the following equation:

Volume = C * A * H * PHIA * (1-Sw) / Bgi

Where:

C = Gas Conversion Constant (43560)

A = Blue or Red dashed polygons (2,300 ac & 640 ac respectively)

H = Net Porosity Grid

PHIA = Average Porosity Grid

Sw = 20% (industry standard)

Bgi = 0.0027 (inputs obtained from 02/01/78 SCB #1 Gas Well Reserve Data provided below)

[illegible]

CULEBRA BLUFF
(ATOKA) WILDCAT
EDDY, NEW MEXICO
DELTA DRLG. D

FILE: CULA1
DATE: 02-01-78
TIME: 14:03:51
PROJ: 1

G A S W E L L R E S E R V E D A T A

(DERIVED FROM PRODUCING HISTORY)

UNSTEADY-STATE PERIOD:

--TIME-- MO-DA-YR	FTP PSI-----	GAS RATE M-D-----	CUM. GAS MMF-----	AVG. RMP PSI-----	DRAINAGE RADIUS	AVERAGE MD-----
1- 3-78	0.	0.	0.	8957.		
1-26-78	221.	45000.	1080.	0.	0.	5.
1-27-78	620.	42000.	1123.	9248.	2503.	9.499

STEADY-STATE PERIOD:

--TIME-- MO-DA-YR	FTP PSI-----	GAS RATE M-D-----	CUM. GAS MMF-----	AVG. RMP PSI-----	RMP-Z PSI-----	CMLY GIP MMF-----
1-28-78	613.	41500.	1164.	9121.	6500.	1258.
1-29-78	616.	40000.	1205.	8022.	6469.	1324.
2- 1-78	598.	40000.	1327.	7970.	6440.	1404.

EFFECTIVE RESERVE DATA:

INPUT ACRES	480.	ACREAGE USED	480.	450
INITIAL RMP INPUT	8957.	INITIAL RMP USED	8957.	
POROSITY, PCT	18.0	WATER SAT., PCT.	20.0	15%
GAS GRAVITY	0.573	RMT, DEGREES F.	135.	
INITIAL Z FACTOR	1.315	WHT, DEGREES F.	70.	
INITIAL VISCOSITY	0.033			
INPUT NET PAY, FT	15.0	INPUT GIP, MMF	1501.	
COMPUTED NET PAY	12.7	COMPUTED GIP, MMF	1404.	
COMPUTED PERM., MD	9.999			

* ESTIMATED
** QUESTIONABLE

READY
BYE
0004*.24 CPU 0006.1 TCH 0011.80 ET

OFF AT 14:05:1 02-01-7

EXHIBIT H

Results of the volumetric analysis indicate there is 32.1 Bcf of storage capacity within the blue polygon. Coincidentally, this is equivalent to the 32.1 Bcf that has been produced from the discussed wells. Given that an 80-85% recovery factor is more likely than 100 percent, we must assume that gas is coming from a larger drainage area than the blue polygon: either from a) less than 5 net porosity feet, b) further NW or SE along the channel, or c) commingled from the "B" Sand. Given that only one of the five wells is commingled with the "B" Sand, and it produced the least amount of gas, it is more likely that the blue polygon does not capture the full drainage radius of the productive wells. Regardless of what the exact size and shape of this drainage radius should be, it is safe to assume that the Atoka "C" sand in the area of the SCB #1 has been effectively drained.

Using the same volumetric inputs, an arbitrary 640 acres surrounding the SCB #1 (red outline on the Net Porosity map above) calculates to have capacity for 8.4 Bcf of gas. When considering this void space for water disposal, the volume converts to 4.1 MMBbls of fluid. This application includes a 24 month water production forecast for Rockcliff's initial four well development in the area. Even if we assume water rates remain flat from month 24 onward, it would take 6 years to fill just this 640 ac area with 4.1 MMBbls of water. For consideration, the volume within the blue polygon, that could hold 15.5 MMBbls of water, could support an additional 16 well development program.

Geologic Formation Tops Reconciliation (NMOCD Folder vs. This Application)

The NMOCD has two Well Completion reports on file for the SCB #1; the new well completion report received March 6, 1978 and a work over report received November 1, 1978. These reports contain conflicting geologic tops for the Atoka Fm, each of which are different from RCE tops relevant to this application. Of interest there is also a cover page of sorts which has additional tops hand written under a headline entitled "NC tops per UB". Below is an explanation and reconciliation of these tops, referencing two versions of a cross-section between the SCB#2 and SCB#1 (1978 and 2017).

COVER PAGE

NMOCD Report		RCE Tops
Penn	- 11052	Agree
Strawn	- 11193	Cisco/Canyon (Some geologists recognize a geologically variable limey shale between the base of the Penn Shale and the top of Strawn)
Atoka	- 11427	Strawn

March Report, pg.2

NMOCD Report		RCE Top
Atoka	- 11754	This depth is four feet into the producing Atoka sand and does not represent the Top of Atoka

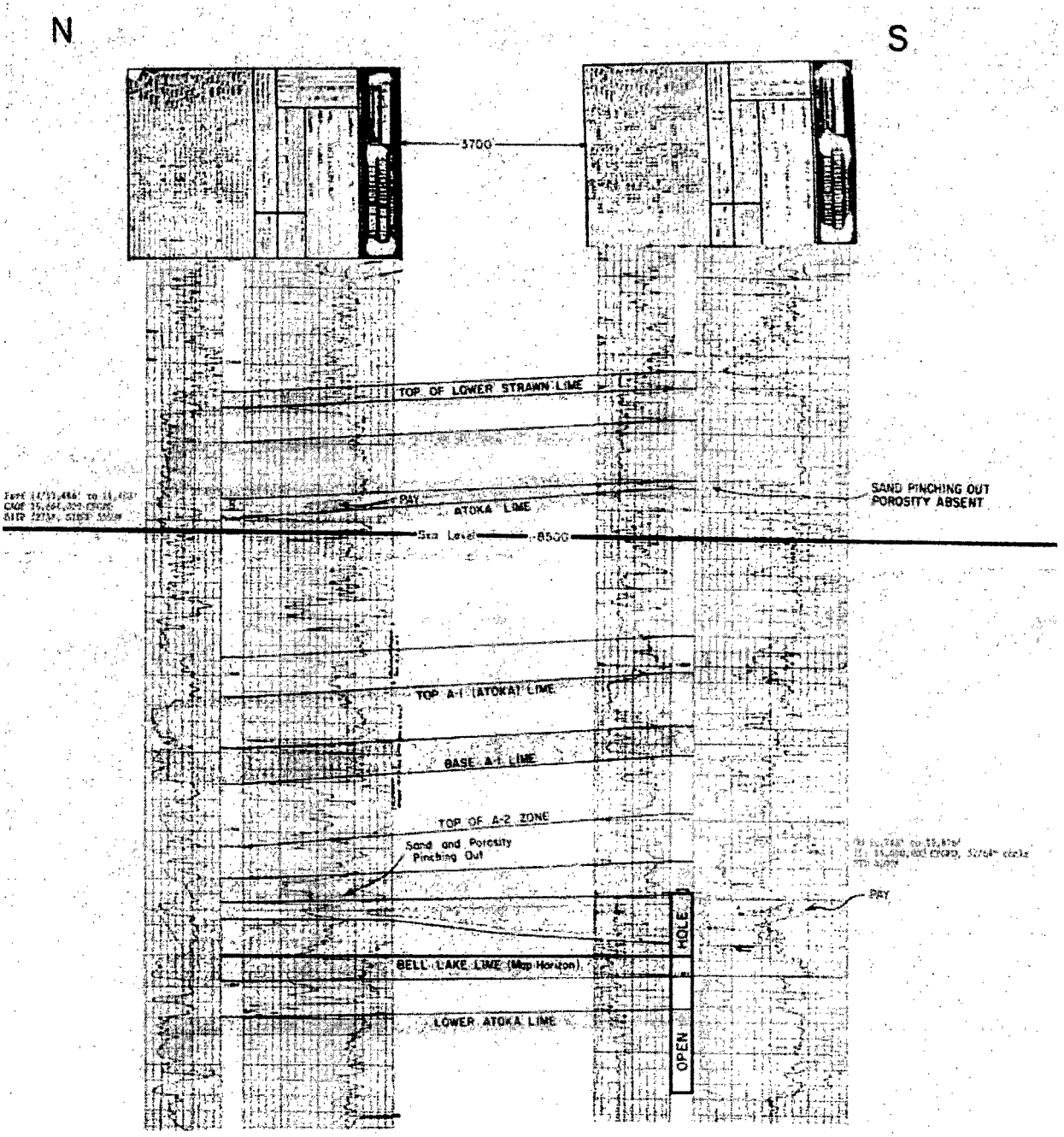
November Report, pg.1

NMOCD Report		RCE Top
Atoka	- 11750-11879	This is the open hole perf interval. 11750 is Top of productive sand, but not the top of Atoka

November Report, pg.2

NMOCD Report		RCE Top
Atoka	- 11480	I could see how someone might argue this since it marks the top of a sand/shale rich interval at the base of a clean carbonate (traditionally Strawn). However, based on regional correlations RCE sees this clastic package as being less contiguous and therefore less diagnostic of Atoka deposition. Rather, RCE picks the top of Atoka at 11660, below which is a more regionally correlative, low resistivity sand/shale package that contains the four productive Atoka sands discussed in Exhibit H above.

1978 Cross Section



DELTA DRILLING COMPANY
West Texas Division
So. CULEBRA BLUFF UNIT
Eddy County, New Mexico
NORTH-SOUTH CROSS SECTION
FEDERAL UNIT
DELTA DRILLING Co. OPERATOR

EXHIBIT I

2017 Cross Section

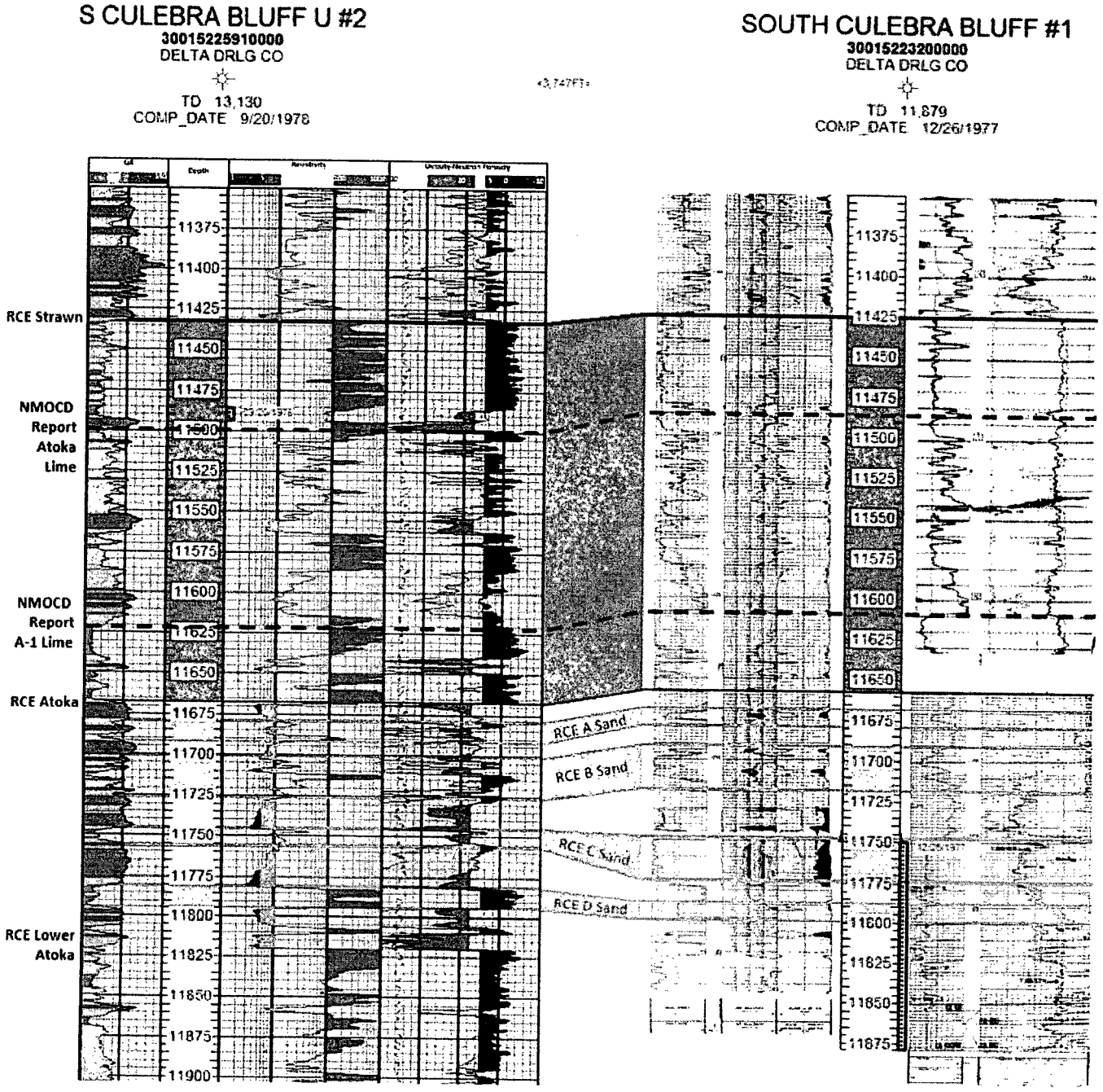
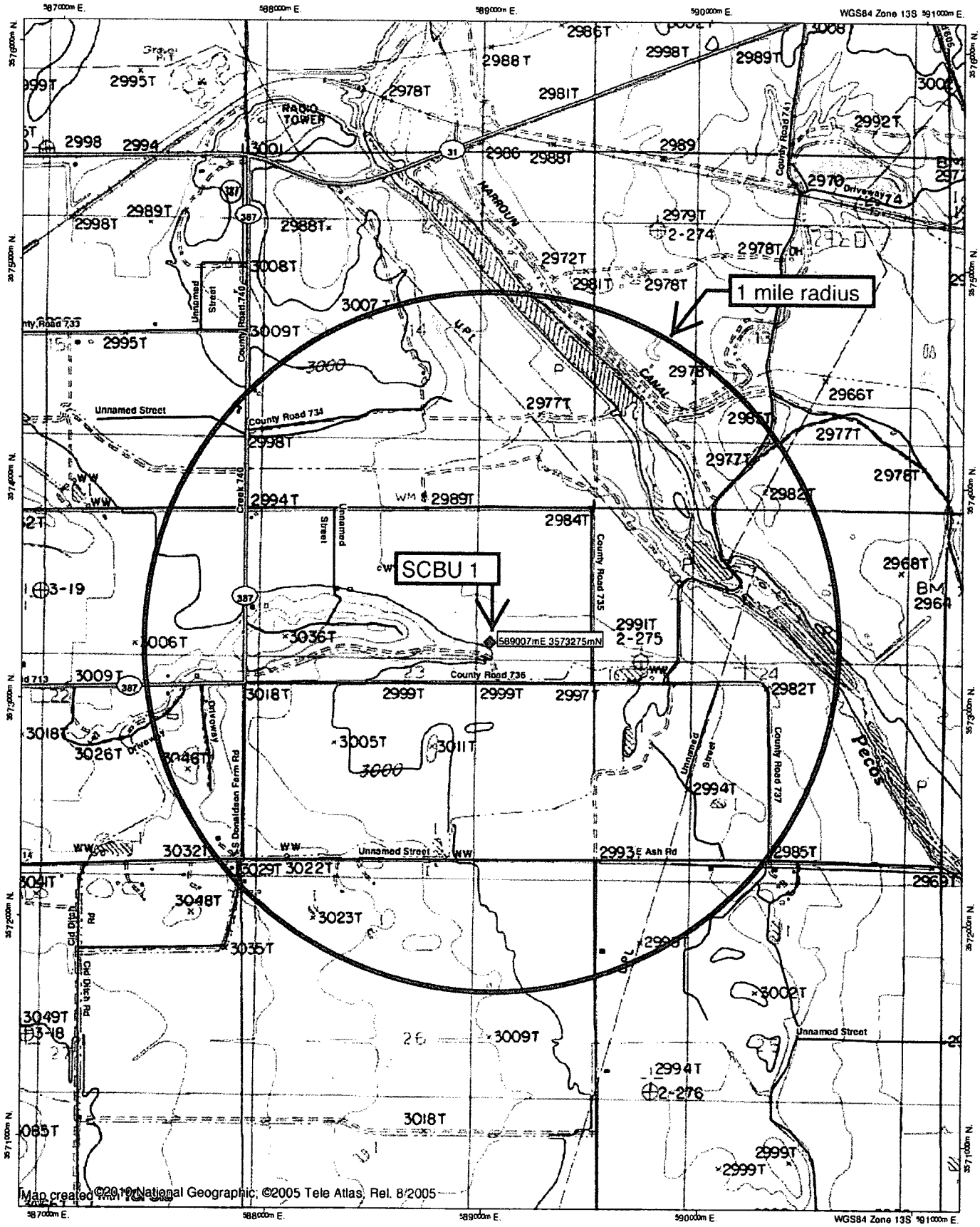


EXHIBIT I

TOPO! map printed on 01/20/17 from "Untitled.tpo"



Map created ©2010 National Geographic, ©2005 Tele Atlas, Rel. 8/2005

NATIONAL GEOGRAPHIC

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km

EXHIBIT J

TN MN 7° 01/20/17

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01102		C	ED		1	2	23	23S	28E	588901	3573672*	410	100	12	88
C 00154		C	ED	4	2	1	23	23S	28E	588595	3573566*	504	196	38	158
C 00154 CLW194067	O		ED	3	2	1	23	23S	28E	588395	3573566*	677	150	65	85
C 01108		C	ED	3	2	1	23	23S	28E	588395	3573566*	677	60	35	25
C 03146		C	ED	1	1	3	24	23S	28E	589613	3572970*	678	82	36	46
C 00500			ED	4	3	1	24	23S	28E	589811	3573176*	810	130		
C 00868			ED	4	3	1	24	23S	28E	589811	3573176*	810	190		
C 03965 POD5		CUB	ED	4	1	1	24	23S	28E	589864	3573534	895	35	31	4
C 03965 POD4		CUB	ED		1	4	24	23S	28E	589918	3573381	917	40	31	9
C 00048		CUB	ED	3	3	1	23	23S	28E	587997	3573160	1016	182	75	107
C 00048	C	CUB	ED	3	3	1	23	23S	28E	587997	3573160	1016	182	75	107
C 01816		C	ED	1	3	1	23	23S	28E	587992	3573355*	1018	200	40	160
C 00869 S-2	O		ED		3	3	23	23S	28E	588097	3572444*	1232	150	58	92
C 00453		C	ED	2	2	4	22	23S	28E	587790	3572945*	1260	65		
C 00443		C	ED	4	2	4	22	23S	28E	587790	3572745*	1327	171	160	11
C 00094		C	ED	3	4	2	22	23S	28E	587588	3573151*	1424	100	60	40
C 00094	C	C	ED	3	4	2	22	23S	28E	587588	3573151*	1424	100	60	40
C 00094 A	C	C	ED	3	4	2	22	23S	28E	587588	3573151*	1424	166	40	126
C 01217			ED	1	1	3	13	23S	28E	589606	3574593*	1447	87	50	37
C 00128		C	ED	2	4	4	15	23S	28E	587783	3574162*	1511	149		
C 01122		C	ED	1	1	1	26	23S	28E	587999	3572138*	1519	175	30	145
C 01215			ED	4	2	3	13	23S	28E	590210	3574397*	1645	104	15	89
C 01443		C	ED		2	1	25	23S	28E	590123	3572064*	1646	50	27	23
C 01967		C	ED		2	3	13	23S	28E	590111	3574498*	1647	264	200	64
C 02189		C	ED	1	1	3	14	23S	28E	587985	3574572*	1651	48	29	19
C 02847			ED	2	1	4	22	23S	28E	587386	3572941*	1655	80		
C 02849			ED	2	1	4	22	23S	28E	587386	3572941*	1655	60		
C 01214			ED	1	2	3	13	23S	28E	590010	3574597*	1659	70	20	50

1610 meters = 1 mile

C 01487 CLW201796	O		ED		3	2	22	23S	28E	587284	3573247*	1723	90	30	60
C 03460 POD1		C	ED	3	1	2	14	23S	28E	588857	3575004	1735	100	38	62
C 00136 S		CUB	ED	1	1	2	25	23S	28E	590426	3572167*	1800	122	45	77
C 00094 AS	C	C	ED	1	3	2	22	23S	28E	587183	3573346*	1825	165	40	125
C 03432 POD1		C	ED	1	2	2	27	23S	28E	587527	3572162	1851	115	75	40
C 00136		CUB	ED	3	1	2	25	23S	28E	590426	3571967*	1929	200	42	158
C 00136 CLW194026	O		ED	3	1	2	25	23S	28E	590426	3571967*	1929	200	52	148
C 00136 CLW235233	O		ED	3	1	2	25	23S	28E	590426	3571967*	1929	200	42	158
C 00269		C	ED	4	4	2	15	23S	28E	587778	3574773*	1937	240	35	205
C 00269 CLW199753	O		ED	4	4	2	15	23S	28E	587778	3574773*	1937	240	35	205
C 00616			ED	1	3	1	14	23S	28E	587982	3574978*	1987	120	30	90
C 00869			ED	3	3	4	22	23S	28E	587188	3572335*	2047	360		
C 00321		C	ED		4	2	15	23S	28E	587679	3574874*	2078	120		
C 02503		C	ED		4	2	15	23S	28E	587679	3574874*	2078	70	12	58
C 01216			ED	4	1	1	13	23S	28E	589801	3575205*	2086	60	45	15
C 00475			ED	2	1	3	25	23S	28E	589822	3571347*	2093	144	38	106
C 01872		C	ED		2	1	22	23S	28E	586878	3573649*	2161	68	48	20
C 02796			ED		2	3	22	23S	28E	586882	3572838*	2169	200		
C 03974 POD1		C	ED	2	2	1	27	23S	28E	587087	3572220	2190	75	43	32
C 01487			ED	3	4	1	22	23S	28E	586779	3573142*	2231	150	38	112
C 01870		C	ED		4	3	22	23S	28E	586885	3572432*	2283	105	48	57
C 03469 POD2		C	ED	3	4	3	11	23S	28E	588382	3575506	2317	48		
C 00641		C	ED	2	2	1	27	23S	28E	586986	3572126*	2324	115	40	75
C 03469 POD3		C	ED	3	4	3	11	23S	28E	588381	3575538	2348	47		
C 03469 POD1		C	ED	3	4	3	11	23S	28E	588374	3575538	2350	68	38	30
C 03001 EXPLORE			ED	1	1	4	25	23S	28E	590430	3571355*	2389	140		
C 00235		C	ED		2	2	15	23S	28E	587676	3575280*	2406	160		
C 00024	O		ED			3	22	23S	28E	586682	3572629*	2413	242	48	194
C 01336		C	ED	2	1	1	22	23S	28E	586572	3573744*	2479	190	30	160
C 02702		C	ED			2	13	23S	28E	590715	3575108*	2505	38	20	18
C 00211		C	ED	4	3	3	15	23S	28E	586570	3573949*	2528	89	48	41
C 02704		C	ED			1	19	23S	29E	591531	3573493*	2533	174		
C 01253			ED	1	3	1	22	23S	28E	586375	3573338*	2632	179	50	129
C 03535 POD1		C	ED	4	3	3	25	23S	28E	589860	3570751	2664	210	25	185
C 00340		C	ED		1	1	27	23S	28E	586483	3572022*	2817	117	18	99
C 00315		C	ED	3	1	3	11	23S	28E	587973	3575995*	2909	100	45	55

C 01885	C	ED		2	2	21	23S	28E	586070	3573640*	2959	104	35	69
C 00072	CUB	ED	3	3	1	15	23S	28E	586364	3574760*	3031	120	54	66
C 00327	CUB	ED	3	2	4	21	23S	28E	585974	3572728*	3081	212		
C 03762 POD3	CUB	ED	4	2	2	16	23S	28E	586203	3574642	3119	40	30	10
C 00571	C	ED	1	3	3	30	23S	29E	591241	3570957*	3219	90	38	52

Average Depth to Water: **45 feet**

Minimum Depth: **12 feet**

Maximum Depth: **200 feet**

Record Count: 69

UTMNAD83 Radius Search (in meters):

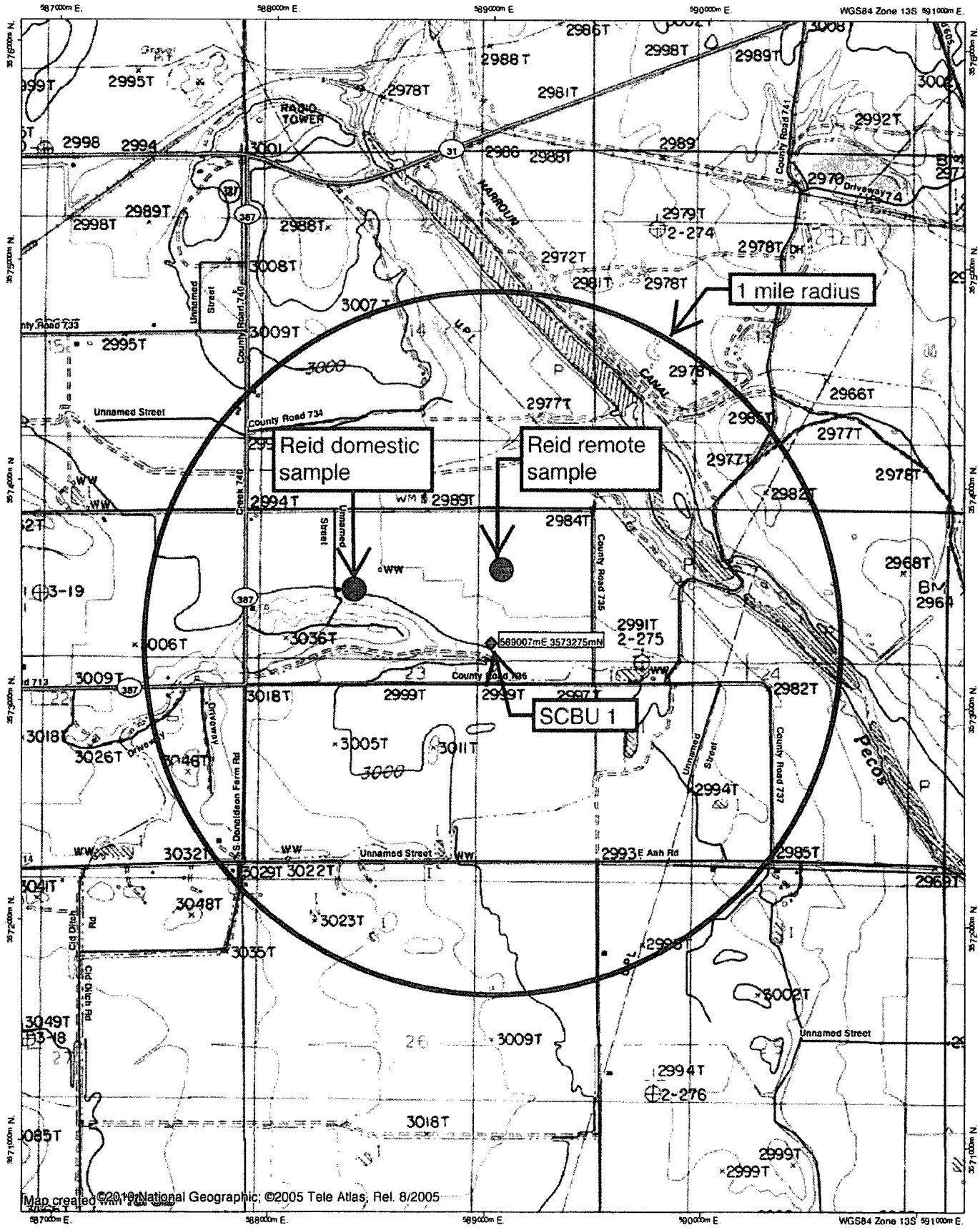
Easting (X): 589007 Northing (Y): 3573275 Radius: 3220

***UTM location was derived from PLSS - see Help**

5/13/17 1:26 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

TOPO! map printed on 01/20/17 from "Untitled.tpo"



NATIONAL GEOGRAPHIC

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km

EXHIBIT K

TN MN 7° 01/20/17

Analytical Report
Lab Order **1703241**
Date Reported: **3/15/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West
Project: Rock Cliff SBCU SWD
Lab ID: 1703241-001 **Matrix:** AQUEOUS

Client Sample ID: SBCU Reid Domestic
Collection Date: 3/2/2017 1:17:00 PM
Received Date: 3/6/2017 1:39:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	1900	100	*	mg/L	200	3/8/2017 5:19:04 AM
EPA METHOD 1664B						Analyst: **tnc**
N-Hexane Extractable Material	ND	10.8		mg/L	1	3/7/2017 5:00:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	6300	20.0	*	mg/L	1	3/8/2017 5:19:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703241**

15-Mar-17

Client: Permits West

Project: Rock Cliff SBCU SWD

Sample ID **MB-30528**	SampType: **MBLK**	TestCode: **EPA Method 1664B**
Client ID: **PBW**	Batch ID: **30528**	RunNo: **41179**
Prep Date: **3/6/2017**	Analysis Date: **3/7/2017**	SeqNo: **1289925** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	10.0								
Silica Gel Treated N-Hexane Extrac	ND	10.0								

Sample ID **LCS-30528**	SampType: **LCS**	TestCode: **EPA Method 1664B**
Client ID: **LCSW**	Batch ID: **30528**	RunNo: **41179**
Prep Date: **3/6/2017**	Analysis Date: **3/7/2017**	SeqNo: **1289926** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36.4	10.0	40.00	0	91.0	78	114			
Silica Gel Treated N-Hexane Extrac	15.8	10.0	20.00	0	79.0	64	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703241**

15-Mar-17

Client: Permits West

Project: Rock Cliff SBCU SWD

Sample ID	MB	SampType:	mblk	TestCode:	EPA Method 300.0: Anions				
Client ID:	PBW	Batch ID:	A41211	RunNo:	41211				
Prep Date:		Analysis Date:	3/8/2017	SeqNo:	1290980	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS	SampType:	lcs	TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSW	Batch ID:	A41211	RunNo:	41211				
Prep Date:		Analysis Date:	3/8/2017	SeqNo:	1290981	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703241**

15-Mar-17

Client: Permits West

Project: Rock Cliff SBCU SWD

Sample ID	MB-30562	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW	Batch ID:	30562	RunNo:	41240				
Prep Date:	3/7/2017	Analysis Date:	3/8/2017	SeqNo:	1292049	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-30562	SampType:	LCS	TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW	Batch ID:	30562	RunNo:	41240				
Prep Date:	3/7/2017	Analysis Date:	3/8/2017	SeqNo:	1292050	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	103	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K

Analytical Report
Lab Order **1703736**
Date Reported: **3/28/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West
Project: Rockcliff SBCU Reid
Lab ID: 1703736-001
Matrix: AQUEOUS
Client Sample ID: SBCU Reid Field Well
Collection Date: 3/13/2017 12:25:00 PM
Received Date: 3/14/2017 3:21:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **LGT**
Chloride	1800	100	*	mg/L	200	3/21/2017 3:23:42 AM
EPA METHOD 1664B						Analyst: **tnc**
N-Hexane Extractable Material	ND	10.5		mg/L	1	3/17/2017
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	6870	200	*D	mg/L	1	3/17/2017 6:11:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of l

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703736**

28-Mar-17

Client: Permits West

Project: Rockcliff SBCU Reid

Sample ID	MB-30751	SampType:	MBLK		TestCode:	EPA Method 1664B				
Client ID:	PBW	Batch ID:	30751		RunNo:	41466				
Prep Date:	3/17/2017	Analysis Date:	3/17/2017		SeqNo:	1300240	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	10.0								

Sample ID	LCS-30751	SampType:	LCS		TestCode:	EPA Method 1664B				
Client ID:	LCSW	Batch ID:	30751		RunNo:	41466				
Prep Date:	3/17/2017	Analysis Date:	3/17/2017		SeqNo:	1300241	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36.4	10.0	40.00	0	91.0	78	114			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1703736**

28-Mar-17

Client: Permits West

Project: Rockcliff SBCU Reid

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	A41501	RunNo:	41501					
Prep Date:		Analysis Date:	3/20/2017	SeqNo:	1302151	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	A41501	RunNo:	41501					
Prep Date:		Analysis Date:	3/20/2017	SeqNo:	1302152	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.5	0.50	5.000	0	90.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703736

28-Mar-17

Client: Permits West

Project: Rockcliff SBCU Reid

Sample ID	MB-30731	SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW	Batch ID:	30731		RunNo:	41476				
Prep Date:	3/16/2017	Analysis Date:	3/17/2017		SeqNo:	1300323	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

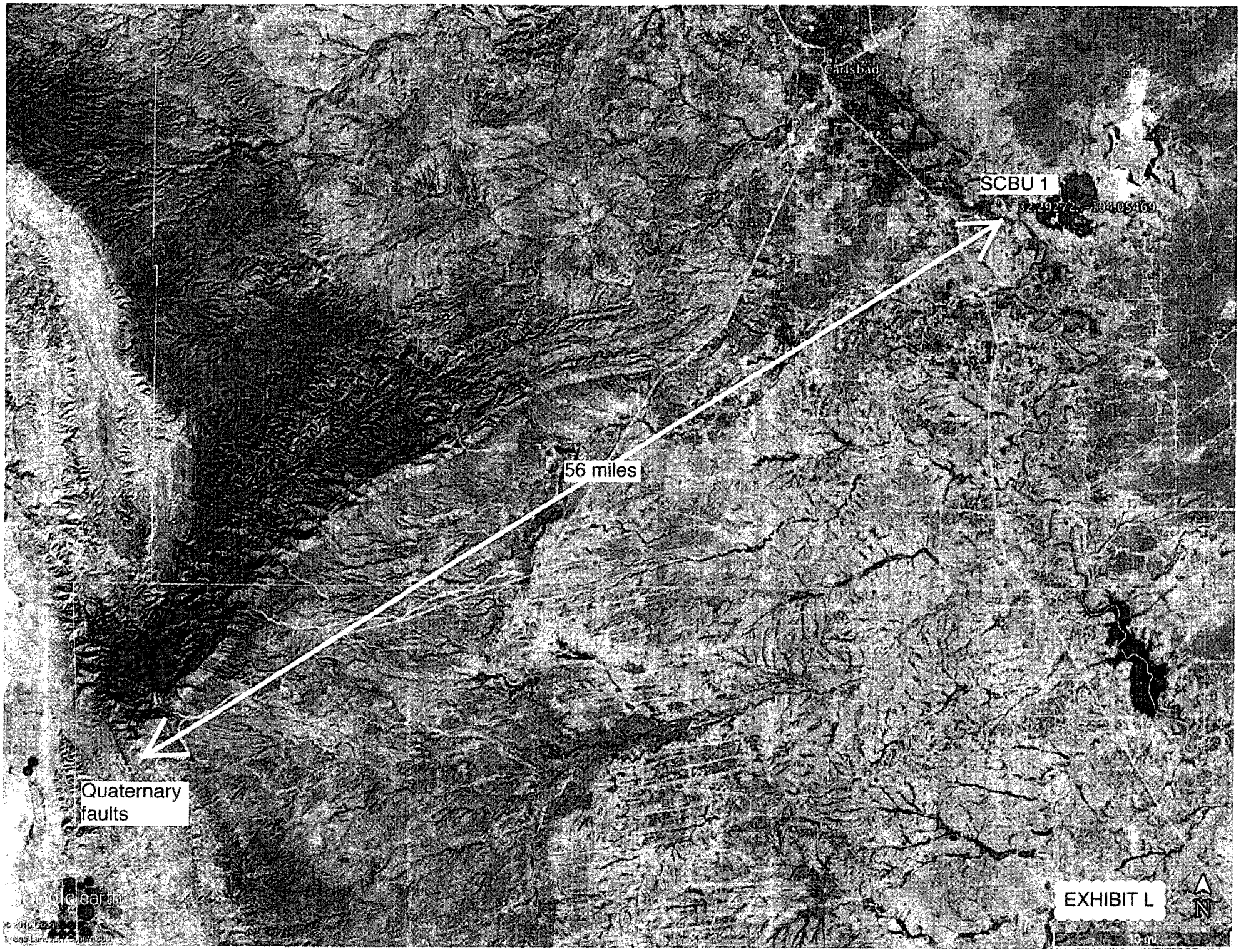
Sample ID	LCS-30731	SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW	Batch ID:	30731		RunNo:	41476				
Prep Date:	3/16/2017	Analysis Date:	3/17/2017		SeqNo:	1300324	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

EXHIBIT K


Carlsbad
SCBU 1
56 miles
Quaternary faults
EXHIBIT L
N

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Sante Fe, New Mexico 87505

RE: Geologic Statement
South Culebra Bluff Unit 1 SWD Conversion
Section 23-Township 23 South-Range 28 East
Eddy County, New Mexico

To whom it may concern:

Rockcliff Energy has reviewed all currently available geologic and engineering data related to the proposed well and no evidence for open faults or any other hydrological connection between the proposed deep Atoka injection zone, located approximately 11,748' TVD (-8,731' ss), and any underground sources of drinking water has been found.

Regards,

Dan Block
Senior Geologist
ROCKCLIFF ENERGY II, LLC
1300 - 1301 McKinney St.
Houston, TX 77010
Office: 713.351.0547
Mobile: 214.471.3331

ROCKCLIFF
ENERGY

EXHIBIT L

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Danny Fletcher, being first duly sworn, on oath says:

That he is the Publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

May 13 2017

That the cost of publication is **$51.48** and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this 16 day of May, 2017

Cynthia Arredondo

My commission Expires 2/13/21

Notary Public

OFFICIAL SEAL
CYNTHIA ARREDONDO
Notary Public
State of New Mexico
My Comm. Expires 2/13/21

May 13, 2017

Rockcliff Operating New Mexico LLC is applying to convert the South Culebra Bluff Unit 1 to a saltwater disposal well. The well is at 1980 FNL & 1650 FEL Sec. 23, T. 23 S., R. 28 E., Eddy County and is 2 miles east of Loving, NM. Disposal will be in the Atoka from 11,750' to 12,039'. Maximum injection pressure will be 2,350 psi. Maximum disposal rate will be 20,000 bwpd. 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 contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.

EXHIBIT M

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87506 (505) 466-8120

June 19, 2017

Johnny & Jackie Reid
245 East London Rd.
Loving NM 88256

Rockcliff Operating New Mexico LLC is applying (see attached application) to deepen the South Culebra Bluff Unit 1 to a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposal. This letter is a notice only. No action is needed unless you have questions or objections.

Well: South Culebra Bluff Unit 1 TD = 11,879'
Proposed Disposal Zone: Atoka (11,750' - 11,879')
Location: 1980' FNL & 1650' FEL Sec. 23, T. 23 S., R. 28 E., Eddy County, NM
Approximate Location: 2 miles east of Loving, NM
Applicant Name: Rockcliff Operating New Mexico LLC (713) 351-0500
Applicant's Address: 1301 McKinney, Suite 1300, Houston TX 77010

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. 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

EXHIBIT N

7016 3010 0000 5787 3594

CERTIFIED MAIL® RECEIPT

Kaiser-Francis Oil Co.
6733 S. Yale Ave.
Tulsa OK 74136
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3549

CERTIFIED MAIL® RECEIPT

Chevron USA Inc.
6301 Deauville Blvd.
Midland TX 79706
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3570

U.S. Postal Service
CERTIFIED MAIL® RECEIPT

Kerr McGee Oil & Gas Onshore LP
1201 Lake Robbins Drive
The Woodlands TX 77380
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3556

U.S. Postal Service
CERTIFIED MAIL® RECEIPT

Cottonwood Partnership LLC
1437 S. Boulder Avenue, Suite 930
Tulsa OK 74119
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3563

U.S. Postal Service
CERTIFIED MAIL® RECEIPT

3.35
2.75
1.82
7.92

PECOS NM
JUN 20 2017
87552-9998

Rash Energy Company c/o Albright
15 West 6th St., Suite 2601
Tulsa OK 74119
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3587

U.S. Postal Service
CERTIFIED MAIL® RECEIPT

Featherstone Development Corporation
PO Box 429
Roswell NM 88202
Rockcliff-SCBU1-Atoka

7016 3010 0000 5787 3365

U.S. Postal Service
CERTIFIED MAIL® RECEIPT

Jackie & Johnny Raid
245 East London Rd.
Loving NM 88256
Rockcliff-SCBU1-Atoka

EXHIBIT N

PROPOSED ADVERTISEMENT

Case No. 15791 :

Application of Rockcliff Operating New Mexico LLC for approval of a salt water disposal well, Eddy County, New Mexico. Applicant seeks an order approving disposal of produced water into the Atoka formation at depths of 11750-11879 feet subsurface in the existing South Culebra Bluff Unit Well No. 1, located 1980 feet from the north line and 1650 feet from the east line of Section 23, Township 23 South, Range 28 East, NMPM. The well is located approximately 3 miles east-northeast of Loving, New Mexico.