DATE IN 12/10/07	SUSPENSE	ENGINEER W Jones	LOGGED IN 12/10/07	TYPE SWD 1106	APP NO. PKVR0734449095

ABOVE THIS LINE FOR DIVISION USE ONLY

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

30-045-34426

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

RECEIVED
2007 DEC 10 AM 9 55

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A] UNIT N, Sec 9 T28N/13W

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☒ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kirt Snyder	Kirt Snyder	District Engineer	11/13/2007
Print or Type Name	Signature	Title	Date

ksnyder@energen.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ___X___Disposal _____Storage
Application qualifies for administrative approval? ___X___Yes _____No

II. OPERATOR: **Energen Resources Corporation**

ADDRESS: **2010 Afton Place**

CONTACT PARTY: **Kirt Snyder** PHONE: **505-325-6800**

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 ___X___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.

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: Kirt Snyder TITLE: District Engineer

SIGNATURE: Kirt Snyder DATE: 11/13/2007

E-MAIL ADDRESS: ksnyder@energen.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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

III. WELL DATA

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

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

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

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

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

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

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

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

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

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

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

Side 1

INJECTION WELL DATA SHEET

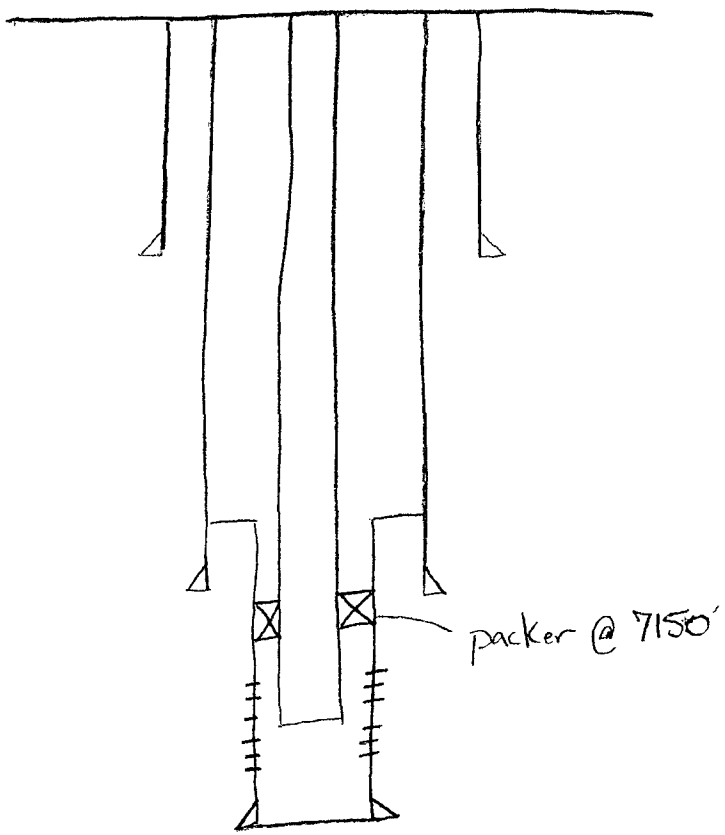
OPERATOR: Energen Resources Corporation

WELL NAME & NUMBER: Central Basin SWD #1

WELL LOCATION: 690' FSL 1727' FEL | O | 9 | 28N | 13W

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12-1/4" Casing Size: 9-5/8" @ 600'

Cemented with: 350 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Visual

Intermediate Casing

Hole Size: 8-3/4" Casing Size: 7-5/8" @ 4645'

Cemented with: 625 sx in two stages *or* _____ ft³

Top of Cement: Surface Method Determined: Visual

Production Casing

Hole Size: 7-7/8" Casing Size 5-1/2" @ 4400'-7725'

Cemented with: 675 sx. *or* _____ ft³

Top of Cement: 4400' Method Determined: ____

Total Depth: 7725'

Injection Interval

7222' feet to 7617'

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

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" 9.3# N-80 Lining Material: IPC

Type of Packer: Large Bore 5-1/2" Baker Lock set or equivalent

Packer Setting Depth: +/- 7,000

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

Additional Data

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

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

2. Name of the Injection Formation: Entrada/Bluff

3. Name of Field or Pool (if applicable): ____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. ____

   No – new well

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Now overlying: Fruitland coal +/- 1,400 to +/- 1,700'

   Pictured Cliffs +/- 1450' to 1750', Gallup +/- 5530' to +/- 5610', and the

   Dakota +/- 6240' to +/- 6400'

I. Purpose: Disposal of Produced Water.

II. Operator: Energen Resources Corporation
2010 Afton Place
Farmington, NM 87401
505.325.6800 - Contact Kirt Snyder

III. Well Data

A (1.) Lease type: FEE
Lease Area: Section 09 T28N R13W
Closest Lease Line: 690'
Well Name and Number: Central Basin SWD #1
Well Location: 690' FSL 1727' FWL Section 09, T28N R13W (Figure 1)

A (2,3,4)

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-600'	12 ¼"	9 5/8"	36 ppf	J-55LT& C
Intermediate	600'-4645'	8 ¾"	7 5/8"	26.4 ppf	N-80 LT& C
Liner	4400'-7725'	7 7/8"	5 ½"	17 ppf	N-80 LT& C
Tubing	0'-7200'		3 ½"	9.3 ppf	N-80

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: String will be cemented in multiple (2) stages. Cement float shoe on bottom of first joint and a float collar on top of first joint. One centralizer every 3rd joint up to the stage collar and one every 3rd joint to surface. Anticpated Stage Collar depth @ 3000'.

Production Liner: Cement float shoe on bottom of first joint with float collar on top of 2nd joint for a two joint shoe track. One centralizer every 3rd joint up to 4750'.

Wellhead

5000 psi 11" x 9 5/8" casing head. 9 5/8" x 7 5/8"x 3 ½" 5000 psi Flanged Wellhead .

Cementing

Surface Casing: 350 sks Type V with 2.0 % $CaCl_2$ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft^3/sk 413 ft^3 of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing:

First Stage: Depending on wellbore conditions, cement may consist of 250 sks 50/50 Type V with 0.30 % Halad-344, 0.10 % CFR-3, 5 #/sk Gilsonite and ¼ #/sk Cellophane Flakes (13.3 ppg, 1.35 ft^3/sk), followed by (338 ft^3 of slurry, 100 % excess to circulate to surface). **Stage Collar at 3000'**. Circulate 4 hours starting at time of plug down.

Second Stage: Depending on wellbore conditions, cement may consist a lead of 325 sks 65/35 Type V with 2.0% $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Cellophane Flakes and a tail of 50 sks Type V with 1.0 % $CaCl_2$. (12.4 ppg, 1.89 ft^3/sk and 15.6 ppg, 1.18 ft^3/sk respectively). (673 ft^3 of slurry, 100% excess to circulate to surface).

Liner:

Depending on wellbore conditions, cement may consist of 475 sks 65/35 Type V with 0.30 % Halad-344, 5 #/sk Gilsonite, ¼ #/sk Cellophane Flakes (12.5 ppg, 1.85 ft^3/sk) followed by 200 sks 50/50 Type V with 0.80 % Halad-9, 5 #/sk Gilsonite, ¼ #/sk Cellophane Flakes (13.5 ppg, 1.35 ft^3/sk). (1149 ft^3 of slurry, 100% excess to circulate off liner top).

Packer/tubing: 3-1/2" 9.3# N-80 IPC (Internally plastic coated) ran with a 5-1/2" Baker model or equivalent – retrievable "Lockset" with high temperature elastomer. Packer will be set within 50' to 100' of top of injection interval.

III. B (1.)The formation for injection will be the Bluff/Entrada,
SWD: Entrada-Chinle Pool code 96159.

B (2.) The injection interval will be cased and perforated.

B (3.) This well will be a new drill specifically for produced water disposal.

B (4.) The estimated injection interval is between 7,222'-7,617'. The injection will occur through cased and cemented 5-1/2" liner – construction described above in section above in III A (2,3,4)

B (5.) In this area the known commercially productive oil/gas zones above the interval are the Fruitland Coal and Pictured Cliffs, usually +/- 1,400 to +/- 1,700 TVD, Gallup +/- 5530' to +/- 5610' TVD, and the Dakota +/- 6240' to +/- 6400' TVD. There are no producing oil/gas zones below the Entrada.

IV. No - This is not an expansion since this is a disposal well and not a secondary recovery well.

V. See attached topographic map denoted (Figure 2) Map – shows ½ mile Area of Review (AOR) and 2 mile radius. Details on the wells within the half mile radius are below (6 gas + 8 P&A) (Table 1).

Table 1. Details on the wells within the ½ mile AOR.

Operator	Well	Well #	Location	Zone	TD (FT)	Status	Distance (FT)
Energen Resources Corporation	CJ Holder	100S	9 28N 13W E2 SW SE	Fruitland Coal	1854	Gas Well	1620
Energen Resources Corporation	CJ Holder	100	9 28N 13W NW SE SW	Fruitland Coal	1890	Gas Well	100
Energen Resources Corporation	CJ Holder	102	8 28N 13W SE SE	Fruitland Coal	1859	Gas Well	2640
Energen Resources Corporation	CJ Holder	17	16 28N 13W SW NE NW	Dakota	6570	Gas Well	1920
Energen Resources Corporation	CJ Holder	101S	16 28N 13W C NW NW	Fruitland Coal	1901	Gas Well	1920
Energen Resources Corporation	CJ Holder	101	16 28N 13W SE NW NE	Fruitland Coal	1940	Gas Well	2400
Hicks Oil & Gas Company	Southeast Cha Cha Unit	9	9 28N 13W SE SW	Gallup/SD/SH/	5837	P&A	190
Hicks Oil & Gas Company	Southeast Cha Cha Unit	4	9 28N 13W S2 NW SW	Gallup/SD/SH/	5770	P&A	1440
Hicks Oil & Gas Company	Southeast Cha Cha Unit	8	8 28N 13W SE SE	Gallup/SD/SH/	5824	P&A	2520
Hicks Oil & Gas Company	Southeast Cha Cha Unit	17	16 28N 13W SE NW	Gallup/SD/SH/	5886	P&A	2640
Hicks Oil & Gas Company	Southeast Cha Cha Unit	13	16 28N 13W NW NW	Gallup/SD/SH/	5875	P&A	1900
Hicks Oil & Gas Company	Southeast Cha Cha Unit	14	16 28N 13W NW NE	Gallup/SD/SH/	5870	P&A	2350
Pan American Corporation	Southeast Cha Cha Unit	10	9 28N 13W SW SE	Gallup/SD/SH/	5810	P&A	1620
Union Texas Petroleum Corporation	CJ Holder	16	9 28N 13W NW SE SW	Dakota	6492	P&A	90

VI. No wells in the area have penetrated the proposed injection (disposal) zone within the ½ mile AOR. As tabulated above (Table 1) and plotted on (Figure 1). The 8 plugged and abandoned wells are listed below. Wellbore schematics are attached (Figures 3 through 10);

1. Southeast Cha Cha Unit 9 – P & A – See attached Figure 3
2. Southeast Cha Cha Unit 4 – P & A – See attached Figure 4
3. Southeast Cha Cha Unit 8 – P & A – See attached Figure 5
4. Southeast Cha Cha Unit 17 – P & A – See attached Figure 6
5. Southeast Cha Cha Unit 13 – P & A – See attached Figure 7
6. Southeast Cha Cha Unit 14 – P & A – See attached Figure 8
7. Southeast Cha Cha Unit 10 – P & A – See attached Figure 9
8. CJ Holder 16 – P & A – See attached Figure 10

VII. Attached data on proposed operating conditions:

1. Proposed Average injection rate = 3,000 bwpd. Maximum = 3,500 bwpd.

2. System will be open and closed (water will be trucked and piped). Facilities will include 8 to10 tanks, of 400 or 500 barrels volume each, two filtration units, and two injection pumps.

3. Average injection pressure = 1800 psi. Maximum pressure = 2000 psi.

Note: well injection rate and pressure will be checked via a step rate test after completion, but prior to commencing injection operations.

4. Water source will be produced Fruitland Coal water from wells operated by Energen Resources in the San Juan Basin. Three produced water analyses from nearby Fruitland Coal wells (Figures 11, 12, and 13) are attached. The injected water should not have any compatibility issues since the deeper zones are generally lower (i.e. higher TDS) quality – any plugging can easily be removed with common acid techniques used in the field or a scale inhibitor can be added to the injection effluent.

5. The Bluff and Entrada have not been proven productive within two miles of the proposed well. There are 2 water analyses from the Entrada and 2 from the Bluff attached as Figures 14, 15, 16, and 17 from nearby disposals. (Energen will attempt to swab back load water after stimulation and take Bluff and Entrada water samples. If successful, then the analyses will be provided to the New Mexico Oil Conservation Division.) According to Stone et al in Hydrogeology and water resources San Juan Basin. New Mexico, lower (known variously as the Junction Creek, Cow Springs, or Bluff member of the) Morrison water near the basin fringe has a specific conductance of <2,000 pmhos. Morrison water from one deep test of the basin had a specific conductance of 4,300 pmhos. Stone et at state, "No wells are known to derive their water exclusively from this aquifer ...." and transmissivity is "relatively low". Stone et at also state, "Generally, however, water from the Entrada is not suitable for drinking, especially in deeper parts of the basin."

VIII. According to the U. S. Geological Survey (Ground Water Atlas of the United States: Arizona. Colorado. New Mexico, Utah HA. 730-C). The middle and lower Morrison is an " ... interbedded fine to medium sandstone, siltstone, and mudstone." It produces oil elsewhere in the basin (e. g., XTO's Ute A #30 in 2-T31N R4W)). Bluff member of the Morrison Formation is predicted to be 75' thick in the planned well bore. The Bluff formation is from 7,222' to 7,297'. The Entrada sandstone is very porous and permeable eolian sandstone. It produces oil elsewhere in the basin (e. g., Eagle Mesa, Media, Ojo Encino, Papers Wash, Snake Eyes Fields). Entrada is estimated to be 160' thick in the well bore. The top is 7,457' and bottom is 7,617'.

Estimated Formation Tops are:	
Nacimiento Formation:	0'
Ojo Alamo Sandstone:	240'
Kirtland Shale:	355'
Fruitland Formation:	1,298'
Pictured Cliffs Sandstone:	1,665'
Lewis Shale:	1,857'
Cliff House Sandstone:	3,215'
Menefee Formation:	3,255'
Point Lookout Sandstone:	4,145'
Mancos Shale:	4,430'
Gallup Ss/Sh:	5,402'
Greenhorn:	6,192'
Graneros:	6,247'
Dakota:	6,247'
Morrison Fm:	6,542'
Bluff Ss:	7,222'
Summerville Fm:	7,297'
Entrada Ss:	7,457'
Chinle Fm:	7,617'
Total Depth:	**7,725'**

There are three water wells within a two mile radius. Of the three water wells, deepest reported depth is 345'. Water well bores are in Quaternary alluvium or the Ojo Alamo sandstone. Possible water bearing strata are 0' to 730'. No existing underground drinking water sources are below the Bluff/Entrada within a two mile radius. There will be 6,877' vertical separation between the bottom of the lowest existing underground water source and the top of the Bluff Ss.

IX. It is anticipated following the perforating on the injection interval each zone will be acid stimulated with 100 gallons 15% HCL per foot. Based on the results of the after-flush step rate test conducted with the acid job Energen will then determine if the well will require a hydraulic fracture stimulation to ensure injection potential.

X. Logging Program:

Open hole logs: From Surface to TD – Temp / HRI / CNT, LDT / GR
Coring: None
Surveys: Surface and/or every 500' to TD

Copies of all Logs will then be provided to NMOCD

XI. There are no water wells within one mile of the proposed disposal location.

XII. Energen is not aware of any geologic or engineering data which indicate the Bluff/Entrada formations are in hydrologic connection with any underground sources of water. There will be 6,877' of vertical separation and four shale zones (Kirtland, Lewis, Menefee, and Mancos) between the top (7,222') of the Bluff and the bottom (345') of the deepest water well – which is **not** within ½ mile of the proposed disposal well.

XIII. Notice (Application for Permit to Drill (Figure 18) and C108) has been sent to the surface owner (Bureau of Land Management) (Figure 19). The offset operators within the ½ mile AOR have been notified (McElvain Oil & Gas, BP-America, and Hicks Oil & Gas) (Figures 20, 21, and 22). A legal ad (Figure 23) will be submitted for publication to the Farmington Daily Times.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name

4 Property Code	5 Property Name	6 Well Number
	CENTRAL BASIN SWD	#1

7 OGRID No.	8 Operator Name	9 Elevation
	ENERGEN RESOURCES CORPORATION	6015'

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	9	28N	13W		690	SOUTH	1727	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

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

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

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

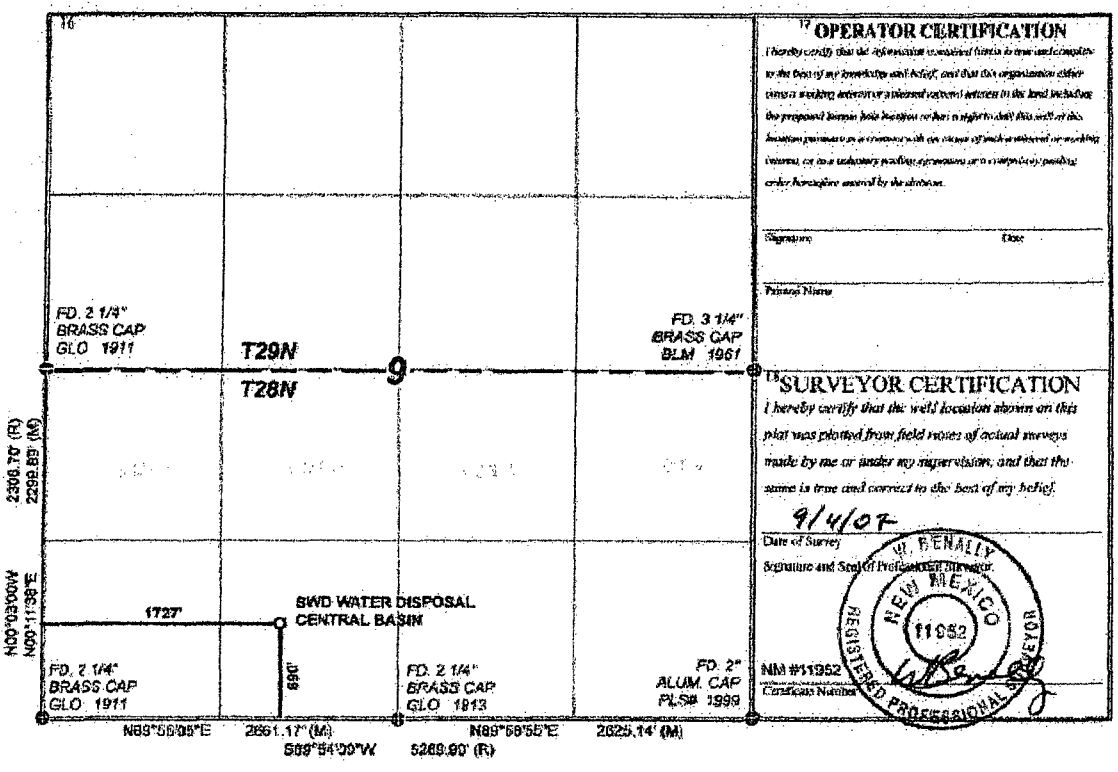


Figure 1: Proposed location of the Central basin SWD #1.

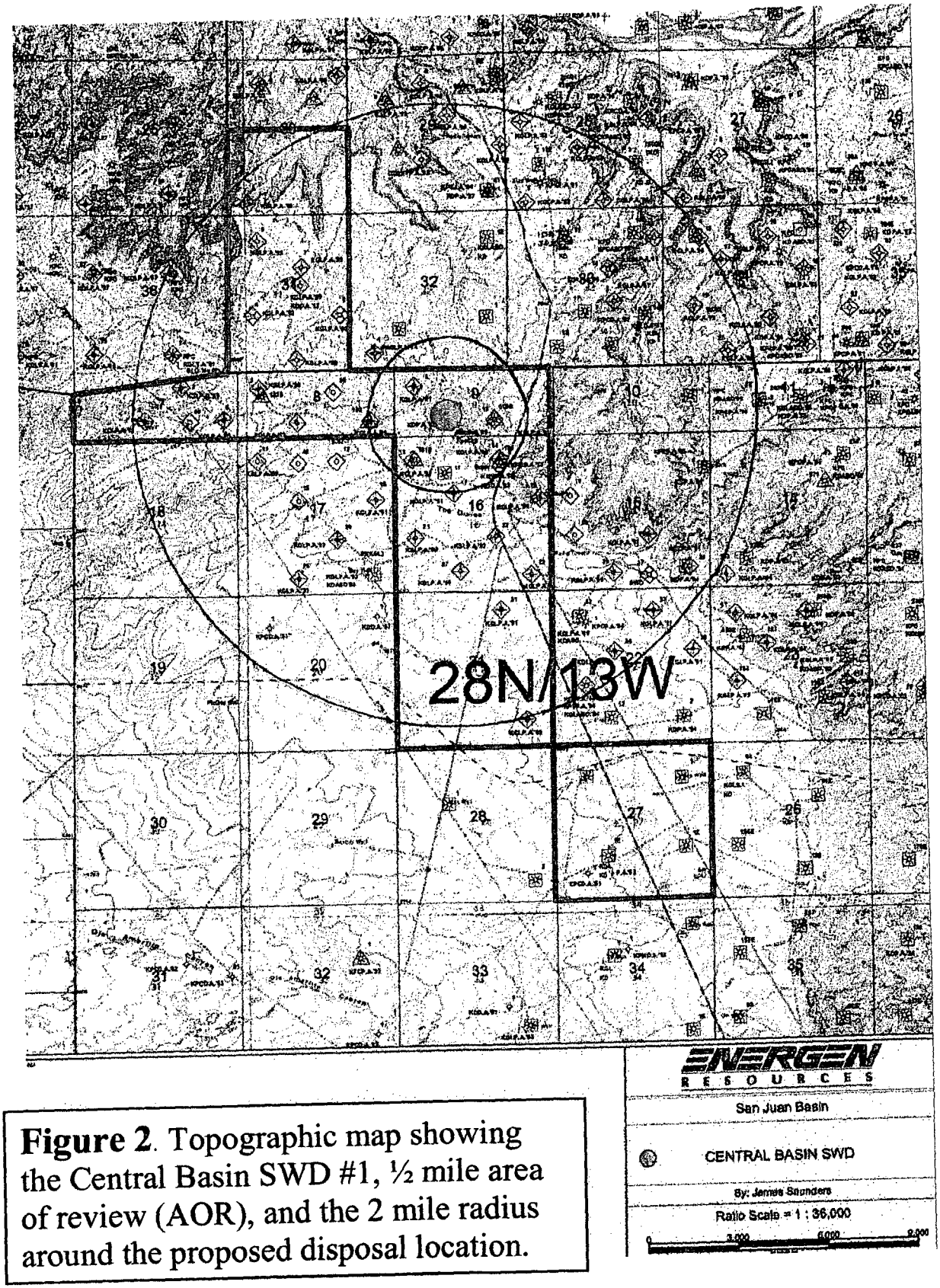
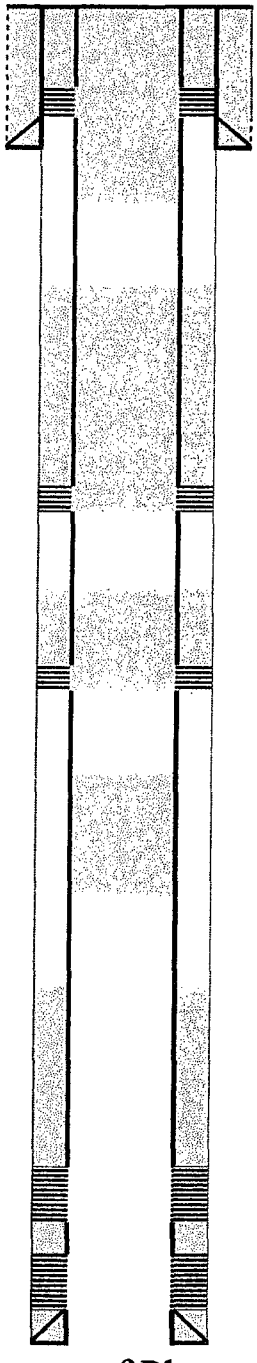


Figure 2. Topographic map showing the Central Basin SWD #1, ½ mile area of review (AOR), and the 2 mile radius around the proposed disposal location.

Southeast Cha Cha Unit 9

Location: N Sec 09 T28N R13W
GL Elevation: 6018'



Cement Plug inside and out from 175'-surface

Cement Plug inside csg from 180'-415'

Cement Plug inside and out from 1315'-1715'

Cement plug Inside and out from 2535'-2635'

Cement Plug inside csg from 3052'-3152'

Perforations in 4-1/2 @ 175'
Surface Casing: 8-5/8" set at 225'
Hole Size: 12-1/4"

Spud Date: 2/9/1961

Completion: 3/9/1961 Fraced w/40,000# sd & 43,500 gals oil

Fruitland top @ 1365'
Pictured Cliffs top @ 1665'
Perforations @ 1715'

Mesaverde top @ 2585'
Perforations @ 2635'

Production Casing: 4-1/2" set at 5831'

PBTD: 5795'
Hole Size: 7 7/8"
TD: 5837'

Estimated TOC @ 5000'

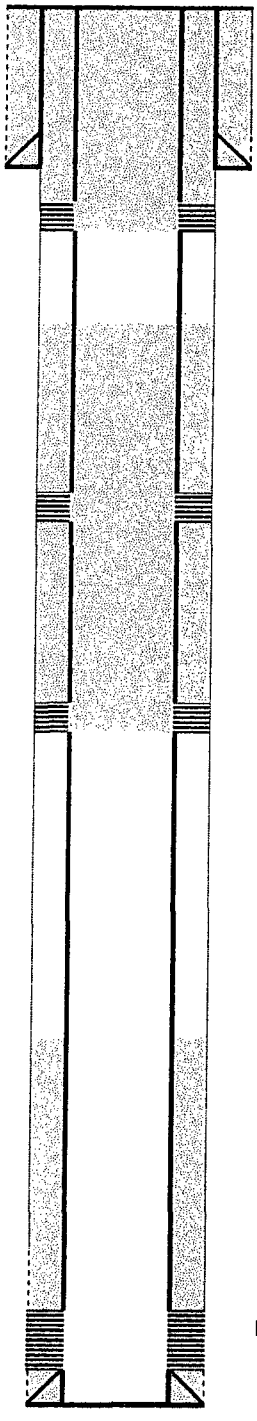
Perforations @ 5691'-5698'

Perforations @ 5752'-5762'

Figure 3: Wellbore diagram of Plugged and Abandoned Oil well

Southeast Cha Cha Unit 4

Location: L Sec 09 T28N R13W
GL Elevation: 5942'



Cement Plug inside and out from Surface to 259'

Cement Plug inside and out from 1187'-1625'

Cement plug Inside and out from 1625'-1825'

Surface Casing: 8-5/8" set at 209'
Hole Size: 12-1/4"

Perforations @ 259'

Spud Date: 4/29/1961

Completion: 3/18/1961 Fraced w/20,000# sd & 21,100 gals oil

Fruitland top @ 1237'
Pictured Cliffs top @ 1580'
Perforations @ 1625'

Perforations @ 1825'

Production Casing: 4-1/2" set at 5767'

PBTD: 5730'
Hole Size: 7 7/8"
TD: 5770'

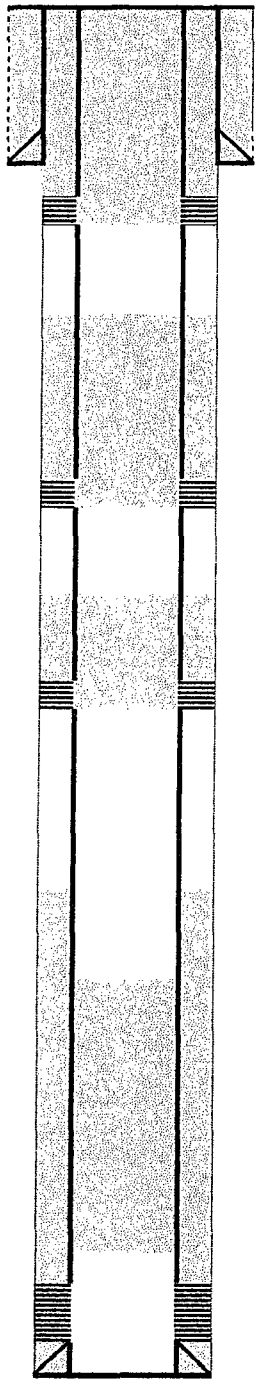
Estimated TOC @ 5000'

Perforations @ 5752'-5762'

Figure 4: Wellbore diagram of Plugged and Abandoned oil well.

Southeast Cha Cha Unit 8

Location: P Sec 08 T28N R13W
GL Elevation: 6023'



Cement Plug inside and out from 400'-surface

Surface Casing: 8-5/8" set at 193'
Hole Size: 12-1/4"

Perforations @ 400'

Spud Date: 12/1/1960

Completion: 12/22/1960 Fraced w/ 16,200# sd & 32,400 gals oil

Cement Plug inside and out from 1700'-1270'

Fruitland top @ 1320'
Pictured Cliffs top @ 1650'
Perforations @ 1700'

Cement plug Inside and out from 3230'-2510'

Mesaverde top @ 3180'
Perforations @ 3230'

Production Casing: 4-1/2" set at 5819'

PBTD: 5781'
Hole Size: 7 7/8"
TD: 5824'

Estimated TOC @ 4900'

Gallup top @ 5320'

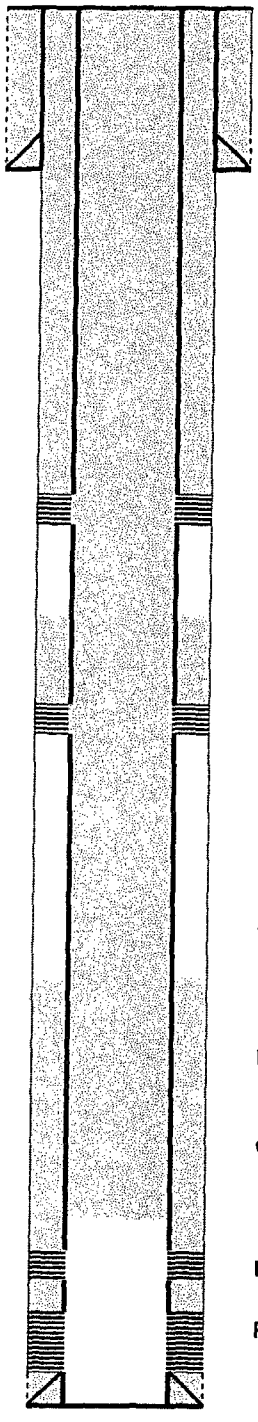
Cement Plug inside csg from 5710'-5270'

Perforations @ 5736'-5748'

Figure 5: Wellbore diagram of Plugged and Abandoned oil well.

Southeast Cha Cha Unit 17

Location: F Sec 16 T28N R13W
GL Elevation: 6080'



Surface Casing: 8-5/8" set at 198'
Hole Size: 12-1/4"

Cement Plug inside and out from 1325'-surface

Spud Date: 3/16/1961

Completion: 4/14/1961 Fraced w/ 16,200# sd & 32,400 gals oil

Fruitland top @ 1375'
Pictured Cliffs top @ 1702"
Perforations @ 1752'

Cement Plug inside and out from 1752'-1325'

Cement Plug inside csg from 2572'-1752'

Cement plug Inside and out from 2672'-2572'

Mesaverde top @ 2622'
Perforations @ 2672'

Production Casing: 4-1/2" set at 5884'

PBTD: 5850'
Hole Size: 7 7/8"
TD: 5886'

Cement Plug inside csg from 5210'-2672'

Estimated TOC @ 5000'

Cement Plug inside csg from 5751'-5210'

Gallup top @ 5370'

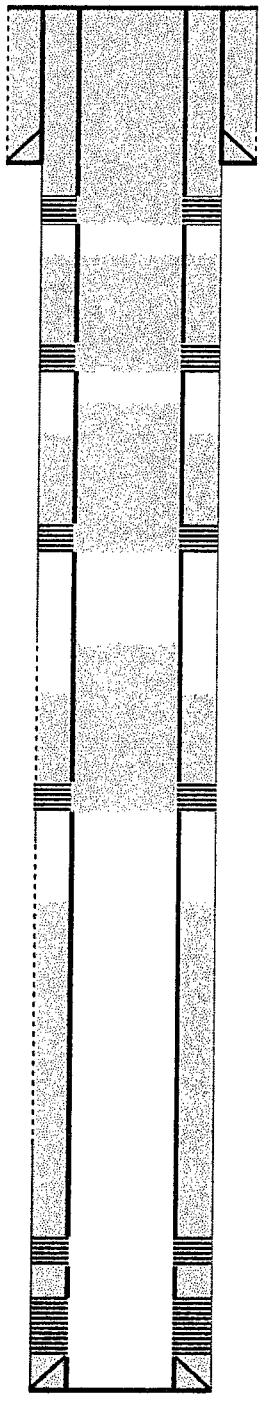
Perforations @ 5729'-5736'

Perforations @ 5784'-5798'

Figure 6: Wellbore diagram of Plugged and Abandoned oil well.

Southeast Cha Cha Unit 13

Location: D Sec 16 T28N R13W
GL Elevation: 6060'



Cement Plug inside and out from 326'-surface

Cement Plug inside and out from 1737'1195'

Cement plug inside csg from 2558'-2508'

Cement Plug inside and out from 2656'-2558'

Cement plug inside csg from 3950'-3900'

Cement plug Inside and out from 4050'-3950'

Surface Casing: 8-5/8" set at 213'
Hole Size: 12-1/4"

Perforations @ 326'

Fruitland top @ 1225'
Pictured Cliffs top @ 1687'
Perforations @ 1737'

Mesaverde top @ 2606'
Perforations @ 2656'

Spud Date: 12/16/1960

Completion: 1/11/1961 Fraced w/ 47,000# sd & 44,250 gals oil

Perforations @ 4050'

Production Casing: 4-1/2" set at 5866'

PBTD: 5830'
Hole Size: 7 7/8"
TD: 5875'

Estimated TOC @ 5000'

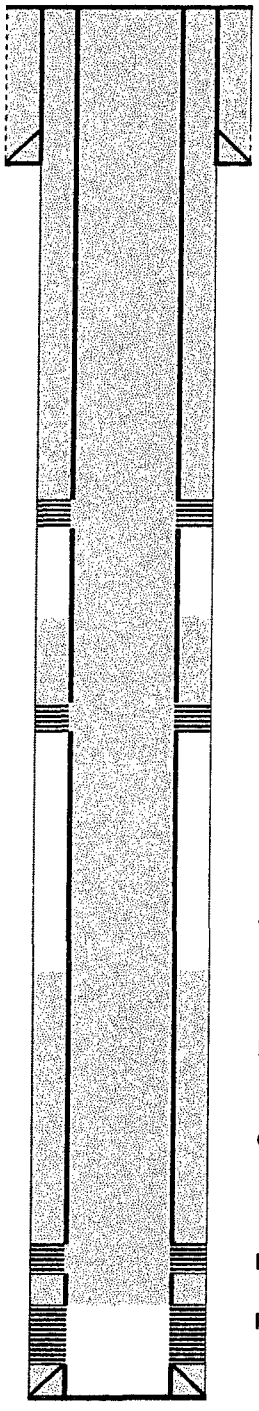
Perforations @ 5707'-5715'

Perforations @ 5767'-5779'

Figure 7: Wellbore diagram of Plugged and Abandoned oil well.

Southeast Cha Cha Unit 14

Location: B Sec T28N R13W
GL Elevation: 6046'



Cement Plug inside and out from 1325'-surface

Surface Casing: 8-5/8" set at 197'
Hole Size: 12-1/4"

Spud Date: 1/2/1961

Completion: 1/25/1961

Fraced w/ 41,900# sd & 45,000 gals oil

Fruitland top @ 1375'
Pictured Cliffs top @ 1715'
Perforations @ 1765'

Cement Plug inside and out from 1765'-1325'

Cement Plug inside csg from 2575'-1765'

Cement plug Inside and out from 2675'-2575'

Mesaverde top @ 2625'
Perforations @ 2675'

Production Casing: 4-1/2" set at 5869'

PBTD: 5830'
Hole Size: 7 7/8"
TD: 5870'

Cement Plug inside csg from 5210'-2675'

Estimated TOC @ 5000'

Cement Plug inside csg from 5772'-5210'

Gallup top @ 5367'

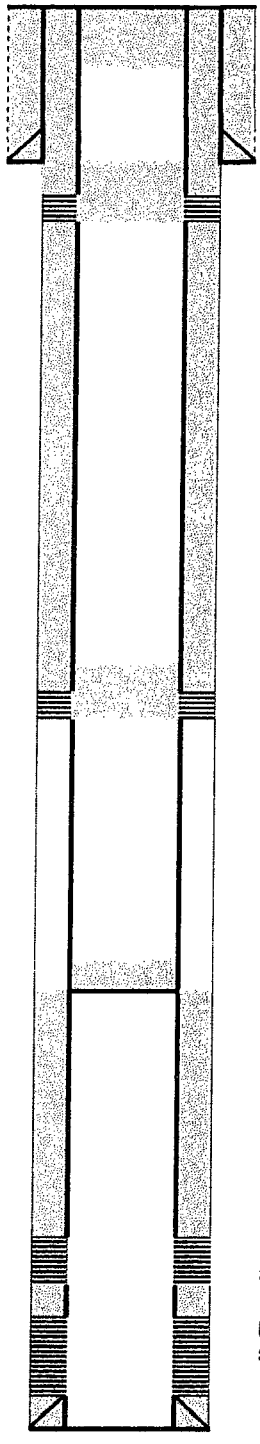
Perforations @ 5726'-5733'

Perforations @ 5788'-5802'

Figure 8: Wellbore diagram of Plugged and Abandoned oil well.

Southeast Cha Cha Unit 10

Location: O Sec 09 T28N R13W
GL Elevation: 5983'



Cement plug in csg from 50' to surface

Squeezed from 675' with 200 sks
No Returns to surface

Cement Plug inside and out from 1700'-1270'

Circulate Cement outside csg from 2500'-675'
Partial Returns to Surface

2 sks cement on top of CIBP

Squeezed 35 sks cement down annulus

Surface Casing: 8-5/8" set at 205'
Hole Size: 12-1/4"

Perforations @ 675'

Spud Date: 5/12/1961

Completion: 5/31/1961 Fraced w/ 25,000# sd & 31,300 gals oil

Fruitland top @ 1320'
Pictured Cliffs top @ 1650'
Perforations @ 1700'

Cement Retainer @ 2500'
Perforations @ 2550'

Production Casing: 4-1/2" set at 5801'

PBTD: 5762'
Hole Size: 7 7/8"
TD: 5810'

CIBP set @ 5000'

Estimated TOC @ 5000'

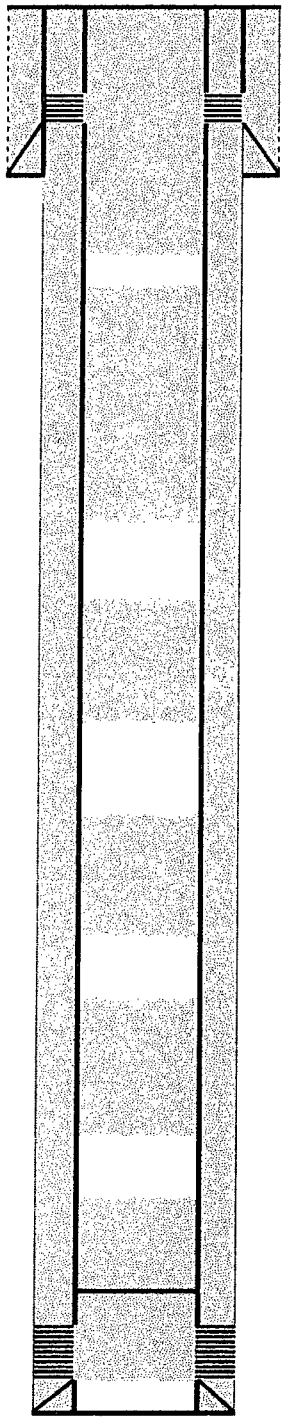
Perforations @ 5655'-5662'

Perforations @ 5716'-5726'

Figure 9: Wellbore diagram of Plugged and abandoned oil well.

CJ Holder 16

Location: N Sec 09 T28N R13W
GL Elevation: 6014'



Cement Inside and out from 270'-surface

Cement Plug inside csg w/ 11 sks at 482'

Cement Plug inside csg w/ 54 sks at 1724'

Cement Plug inside csg w/ 11 sks at 2640'

Cement plug Inside csg from 3300'-3164'

Cement Plug inside csg w/ 11 sks at 5380'

Set cement retainer @ 6175'

Cement DK perfs w/ 30 sks and spot 85 sks on top of retainer

Perforations @ 270'

Surface Casing: 8-5/8" set at 412'
Hole Size: 12-1/4"

Spud Date: 5/18/1981

Completion: 9/3/1981
Fraced w/ 130,000# 20/40 sd & 90,000 gals 30# x-linked gel

Fruitland Top @ 1363'

Pictured Cliffs Top @ 1650'

Mesaverde Top @ 2575'

Production Casing: 4-1/2" set at 6492'

PBTD: 6448'
Hole Size: 7 7/8"
TD: 6492'

Gallup Top @ 5320

Dakota Top @ 6228'

Perforations @ 6244'-6284'

Figure 10: Wellbore diagram of Plugged and Abandoned gas well.

BJ SERVICES
Farmington District Lab
Water Analysis Report

Test # 0

Customer/Well Information

Company:	Energen	**Date:**	5/15/2006
Well Name:	Richardson101S	**Prepared for:**	
Location:	00-000-00000	**Submitted by:**	
State:	County, N.M.	**Prepared by:**	Eden Fine
Formation:	unknown	**Water Type:**	Produced
Depth:	unknown		

Background Information

Reason for Testing: routine
Completion type:
Well History:
Comments:

Sample Characteristics

Sample Temp:	70 (°F)	**Viscosity:**	1cP
pH:	7.96	**Color:**	clear
Specific Gravity:	1.045	**Odor:**	none
S.G. (Corrected):	1.047 @ 60 °F	**Turbidity:**	slight
Resistivity (Meas.):	0.15 Ω-m	**Filtrates:**	0%

Sample Composition

		mg/l	me/l	ppm
CATIONS	Sodium (calc.)	29864	1299.0	28578
	Calcium	1805	90.0	1727
	Magnesium	1944	159.9	1860
	Barium	0	0.0	0
	Potassium	110	2.8	105
	Iron	0.00	0.0	0.00
ANIONS	Chloride	55000	1551.5	52632
	Sulfate	0	0.0	0
	Hydroxide	0	0.0	0
	Carbonate	< 1	----	----
	Bicarbonate	329	5.4	315
SUMMARY	Total Dissolved Solids(calc.)	88942		85111
	Total Hardness as CaCO3	12510	250.0	11971

Scaling Tendencies

CaCO3 Factor 594402.3 Calcium Carbonate Scale Probability --> POSSIBLE
CaSO4 Factor 0 Calcium Sulfate Scale Probability ------> REMOTE

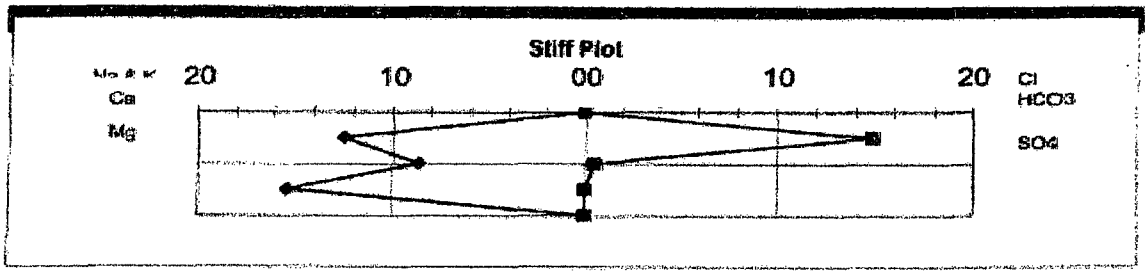


Figure 11: Water analysis from Energen Resources operated Fruitland Coal well.

BJ SERVICES
Farmington District Lab
Water Analysis Report

Test # 0

Customer/Well Information

Company:	Energen	**Date:**	5/15/2006
Well Name:	RichardsonGas Com 3E	**Prepared for:**	
Location:	00-000-00000	**Submitted by:**	
State:	County, N.M.	**Prepared by:**	Eden Fine
Formation:	unknown	**Water Type:**	Produced
Depth:	unknown		

Background Information

Reason for Testing: routine
Completion type:
Well History:
Comments:

Sample Characteristics

Sample Temp:	70 (°F)	**Viscosity:**	1cP
pH:	7.96	**Color:**	clear
Specific Gravity:	1.020	**Odor:**	none
S.G. (Corrected):	1.022 @ 60 °F	**Turbidity:**	slight
Resistivity (Meas.):	0.35 Ω-m	**Filtrates:**	0%

Sample Composition

		mg/l	me/l	ppm
CATIONS	Sodium (calc.)	17787	773.7	17438
	Calcium	521	26.0	511
	Magnesium	486	40.0	476
	Barium	0	0.0	0
	Potassium	240	6.1	235
	Iron	50.00	1.8	49.02
ANIONS	Chloride	30000	846.3	29412
	Sulfate	0	0.0	0
	Hydroxide	0	0.0	0
	Carbonate	< 1	---	---
	Bicarbonate	268	4.4	263
SUMMARY	Total Dissolved Solids(calc.)	49113		48150
	Total Hardness as CaCO3	3303	66.0	3238

Scaling Tendencies

CaCO3 Factor 139916.9 Calcium Carbonate Scale Probability --> REMOTE
CaSO4 Factor 0 Calcium Sulfate Scale Probability ------> REMOTE

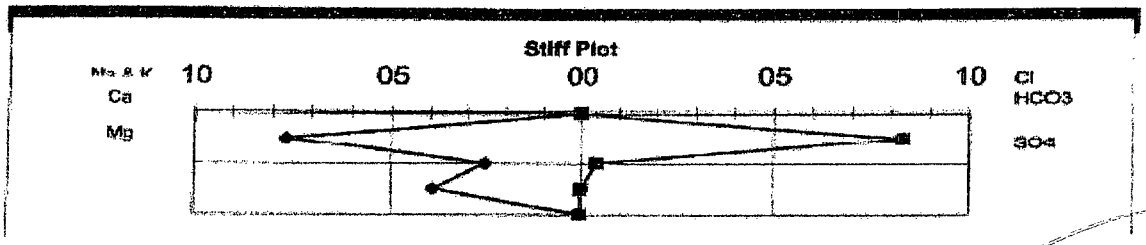


Figure 12: Water analysis from Energen Resources operated Fruitland Coal well.

BJ SERVICES
Farmington District Lab
Water Analysis Report

Test # 0

Customer/Well Information

Company:	Energen	**Date:**	5/15/2006
Well Name:	HarmonA25	**Prepared for:**	
Location:	00-000-00000	**Submitted by:**	
State:	County, N.M.	**Prepared by:**	Eden Fine
Formation:	unknown	**Water Type:**	Produced
Depth:	unknown		

Background Information

Reason for Testing:	routine
Completion type:	
Well History:	
Comments:	

Sample Characteristics

Sample Temp:	70 (°F)	**Viscosity:**	1cP
pH:	6.82	**Color:**	clear
Specific Gravity:	1.055	**Odor:**	none
S.G. (Corrected):	1.057 @ 60 °F	**Turbidity:**	slight
Resistivity (Meas.):	0.15 Ω-m	**Filtrates:**	0%

Sample Composition

CATIONS

	mg/l	me/l	ppm
Sodium (calc.)	40388	1756.7	38281
Calcium	1404	70.0	1330
Magnesium	1823	149.9	1727
Barium	0	0.0	0
Potassium	310	7.9	294
Iron	3.00	0.1	2.84

ANIONS

Chloride	70000	1974.6	66351
Sulfate	0	0.0	0
Hydroxide	0	0.0	0
Carbonate	< 1	----	----
Bicarbonate	1037	17.0	983

SUMMARY

Total Dissolved Solids(calc.)	114652		108675
Total Hardness as CaCO3	11009	220.0	10435

Scaling Tendencies

CaCO3 Factor	1455430	Calcium Carbonate Scale Probability --> PROBABLE
CaSO4 Factor	0	Calcium Sulfate Scale Probability -------> REMOTE

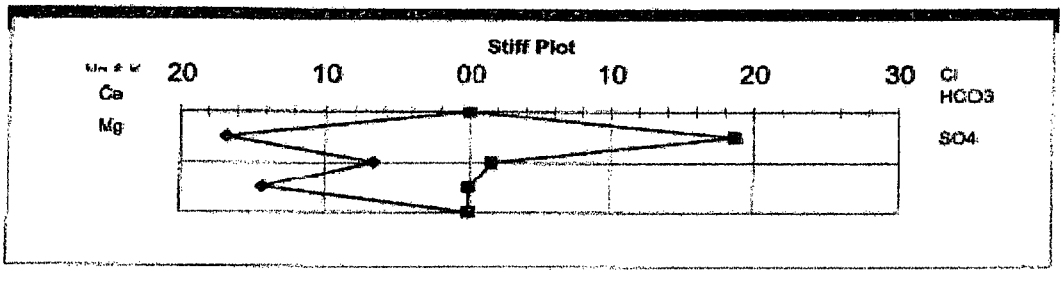


Figure 13: Water analysis from Energen Resources operated Fruitland Coal well.

HALLIBURTON

Water Analysis Report

ENTRADA

To:	XTO	Date:	4/15/02
Submitted by:	Halliburton Energy Services	Date Rec:	4/15/02
Attention:	Ray Martin	Report #:	FLAM02251
Well Name:	Ashcroft SWD #1	Formation:	Entrada / Produced water

Some sample given to On Site Tech.

r_martin@xtoenergy.com

Specific Gravity	1.045	
pH	6.06	
Resistivity	0.17	@ 70° F
Iron (Fe)	25	Mg / L
Potassium (K)	400	Mg / L
Sodium (Na)	14770	Mg / L
Calcium (Ca)	2080	Mg / L
Magnesium (Mg)	391	Mg / L
Chlorides (Cl)	26850	Mg / L
Sulfates (SO_4)	4000	Mg / L
Carbonates (CO_3)	0.0	Mg / L
Bicarbonates (HCO_3)	407	Mg / L
Total Dissolved Solids	49930	Mg / L

Respectfully: Bill Loughridge

Title: Senior Scientist

Location: Farmington, NM

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

Figure 14: Water analysis from Entrada Formation showing 46,930 TDS.

HALLIBURTON

Water Analysis Report

To:	XTO	Date:	12/3/02
Submitted by:	Halliburton Energy Services	Date Rec:	11/30/02 Flu tank Morrison only
Attention:	Ray Martin	Report #:	FLMX2818
Well Name:	Ashcroft SWD #1	Formation:	Morrison (Bluff) 6952' - 7070'

Anthrone Test for Broken Gel = Negative

Specific Gravity	1.030	
pH	6.80	
Resistivity	0.31	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	250	Mg / L
Sodium (Na)	9789	Mg / L
Calcium (Ca)	418	Mg / L
Magnesium (Mg)	73	Mg / L
Chlorides (Cl)	13600	Mg / L
Sulfates (SO_4)	3000	Mg / L
Carbonates (CO_3)	0.0	Mg / L
Bicarbonates (HCO_3)	813	Mg / L
Total Dissolved Solids	27944	Mg / L

Respectfully: Robin Lesher

Title: Associate Chemist

Location: Farmington, NM

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

Figure 15: Water analysis from the Bluff member of the Morrison Formation showing 27,944 TDS.

ON SITE TECHNOLOGIES, LTD.

OFF: (505) 325-5667
FAX: (505) 327-1496

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 01-May-02

Client:	XTO Energy	**Client Sample Info:**	XTO Energy
Work Order:	0204015	**Client Sample ID:**	Ashcroft SWD #1 Entrada Water
Lab ID:	0204015-01A Matrix: AQUEOUS	**Collection Date:**	04/12/2002 5:00:00 PM
Project:	Ashcroft SWD #1 Entrada Water	**COC Record:**	11878

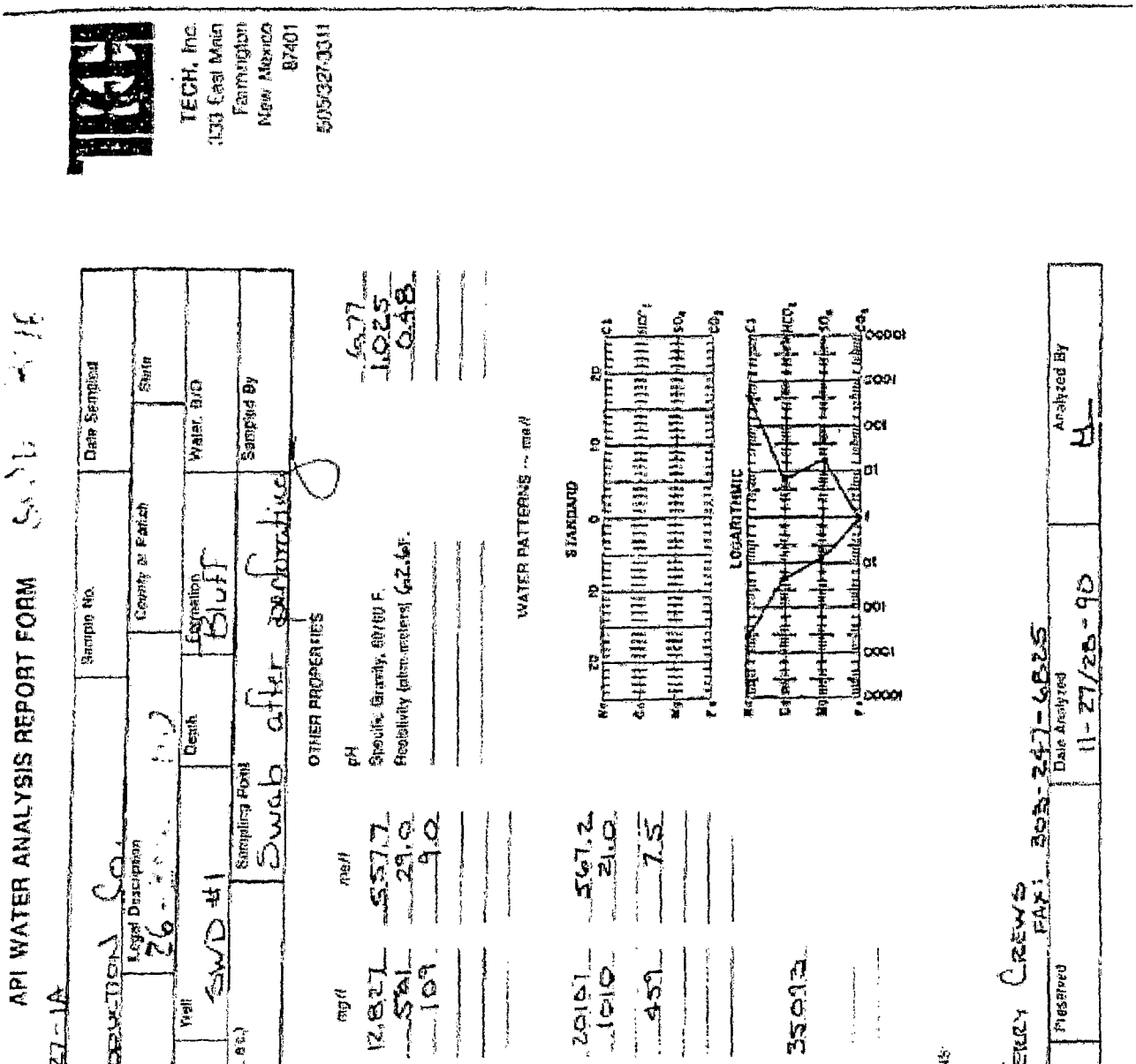
Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: HNR
Chloride	28000	332		mg/L	5030	04/15/2002
Sulfate	951	402		mg/L	5030	04/15/2002
ICP METALS, DISSOLVED		**SW6010B**				Analyst: DJC
Calcium 317.933	1920	2.38		mg/L	235	04/23/2002
Iron 259.939	8.76	0.24		mg/L	10	04/22/2002
Magnesium 285.213	393	1.64		mg/L	235	04/22/2002
Potassium 766.490	260	14.0		mg/L	235	04/22/2002
Sodium 589.592	15100	4.47		mg/L	235	04/22/2002
ALKALINITY, TOTAL		**M2320 B**				Analyst: HNR
Alkalinity, Bicarbonate (As CaCO3)	240	5		mg/L CaCO3	1	04/25/2002
Alkalinity, Carbonate (As CaCO3)	ND	5		mg/L CaCO3	1	04/25/2002
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	04/25/2002
Alkalinity, Total (As CaCO3)	240	5		mg/L CaCO3	1	04/25/2002
HARDNESS, TOTAL		**M2340 B**				Analyst: HNR
Hardness (As CaCO3)	5700	1		mg/L	1	04/29/2002
PH		**E150.1**				Analyst: HNR
pH	6.1	2		pH units	1	04/15/2002
Temperature	23			deg. C	1	04/15/2002
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: HNR
Resistivity	0.141	0.001		ohm-m	1	04/19/2002
SPECIFIC GRAVITY		**M2710 F**				Analyst: HNR
Specific Gravity	1.036	0.001		Units	1	04/19/2002
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: HNR
Total Dissolved Solids (Residue, Filterable)	50700	40		mg/L	1	04/19/2002
TOTAL DISSOLVED SOLIDS		**CALC**				Analyst: HNR
Total Dissolved Solids (Calculated)	47630	5		mg/L	1	04/29/2002

Qualifiers: PQL - Practical Quantitation Limit; S - Spike Recovery outside accepted recovery limits
ND - Not Detected at Practical Quantitation Limit; R - RPD outside accepted precision limits
J - Analyte detected below Practical Quantitation Limit; E - Value above quantitation range
B - Analyte detected in the associated Method Blank; Surr - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM
- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Figure 16: Water analysis from Entrada Formation showing 47,630 TDS.



API WATER ANALYSIS REPORT FORM

TECH, Inc.
1133 East Main
Farmington
New Mexico
87401
505/327-3311

Laboratory No. 25-90027-1A
Company Amoco Production Co.
Field
Legal Description 26-
Lease or Unit E.E. East
Well SWD #1
Depth
Formation Bluff
County or Parish
State
Sampling Point Swab after separator
Sample No.
Date Sampled
Water, B/O
Type of Water (Produced, Supply, etc.) Produced
Sampled By

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	12,827	557.7
Calcium, Ca	584	29.9
Magnesium, Mg	109	9.0
Barium, Ba		

ANIONS		
Chloride, Cl	20151	567.2
Sulfate, SO_4	1010	21.0
Carbonate, CO_3		
Bicarbonate, HCO_3	459	7.5

Total Dissolved Solids (calc.) 35093

Iron, Fe (total)
Sulfide, as H_2S

OTHER PROPERTIES

pH	6.77
Specific Gravity, 60/60 F.	1025
Resistivity (ohm-meters) @ 24 F.	.048

WATER PATTERNS -- me/l

STANDARD

LOGARITHMIC

REMARKS & RECOMMENDATIONS:

Attn: Terry Crews
FAX: 505-327-4625

Date Received	Reported	Date Analyzed	Analyzed By
11-27-90		11-27-90	

Figure 17: water analysis from the Bluff member of the Morrison Formation showing 35,093 TDS.

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMSF-077968

1a. Type of Work: [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name:

1b. Type of Well: [ ] Oil Well [ ] Gas Well [X] Other [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.:

2. Name of Operator: Energen Resources Corporation

8. Lease Name and Well No.: Central Basin SWD #1

3a. Address: 2198 Bloomfield Highway Farmington, New Mexico 8740

3b. Phone No. (include area code): (505) 325-6800

9. API Well No.: 30-045-34426

4. Location of Well (*Report location clearly and in accordance with any State equirements*)*
At surface: 690 fsl, 1727 fwl
At proposed prod. zone:

10. Field and Pool, or Exploratory: Mesa Verde, 96160

11. Sec., T., R., M., or Blk. and Survey or Area: (N) Sec 9, T28N, R13W

14. Distance in miles and direction from nearest town or post office*: 4 miles south of Farmington

12. County or Parish: San Juan

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
690'		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 50'	19. Proposed Depth 4645'	20. BLM/BIA Bond No. on file NM2707
21. Elevations (Show whether DF, KDB, RT, GL, etc. 6015' GL	22. Approximate date work will start* 11/15/07	23. Estimated duration 25 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (*Printed/Typed*)	Date
	Nathan Smith	9/11/07

Title: Drilling Engineer

Approved by (Signature)	Name (*Printed/Typed*)	Date
		11/8/07
Title: AFM	Office: FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

RECEIVED
SEP 12 2007
Bureau of Land Management
Farmington Field Office

OPERATOR

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

Figure 18: Application for Permit to Drill approved by BLM November 8, 2007.

ENERGEN
RESOURCES

Memorandum

Bureau of Land Management
1235 LaPlata Highway
Farmington, NM 87401

November 12, 2007

As required by the New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Energen Resources Corporation is applying (see attached application) to drill its Central Basin SWD #1 well.

Well Name: Central Basin SWD #1
Total Depth: 7,725'
Proposed Disposal Zone: Bluff/Entrada (7,222' to 7,617')
Location: 690' FSL & 1727' FWL Section 09, T28N R13W, San Juan County, NM
Applicant Name: Energen Resources Corporation
Applicant's Address: 2010 Afton Place, Farmington, NM 87401

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

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

See attached C108. APD submitted 9/11/2007

AN ENERGEN COMPANY

Figure 19: Notification of C108 memo to BLM received November 13, 2007.

ENERGEN RESOURCES

Certified Mail 7007 1490 0000 5397 2598

Memorandum

Hicks Oil & Gas Inc.
P O Drawer 3307
Farmington, NM 87499

November 12, 2007

As required by the New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Energen Resources Corporation is applying (see attached application) to drill its Central Basin SWD #1 well.

Well Name: Central Basin SWD #1
Total Depth: 7,725'
Proposed Disposal Zone: Bluff/Entrada (7,222' to 7,617')
Location: 690' FSL & 1727' FWL Section 09, T28N R13W, San Juan County, NM
Applicant Name: Energen Resources Corporation
Applicant's Address: 2010 Afton Place, Farmington, NM 87401

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

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

AN ENERGEN COMPANY

Figure 20: Notification of C108 sent to Hicks Oil & Gas Inc.

Memorandum

ENERGEN RESOURCES

Certified Mail 7007 1490 0000 5397 2604

T.H. McElvain Oil & Gas
1050 17th Street, Suite 1800
Denver, CO 80265

November 12, 2007

As required by the New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Energen Resources Corporation is applying (see attached application) to drill its Central Basin SWD #1 well.

Well Name: Central Basin SWD #1
Total Depth: 7,725'
Proposed Disposal Zone: Bluff/Entrada (7,222' to 7,617')
Location: 690' FSL & 1727' FWL Section 09, T28N R13W, San Juan County, NM
Applicant Name: Energen Resources Corporation
Applicant's Address: 2010 Afton Place, Farmington, NM 87401

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

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

Figure 21: Notification of C108 sent to T. H. McElvain Oil & Gas.

ENERGEN
RESOURCES

Certified Mail 7007 1490 0000 5397 2581

Memorandum

BP-America
501 Westlake Park Blvd.
Houston, TX 77079

November 12, 2007

As required by the New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Energen Resources Corporation is applying (see attached application) to drill its Central Basin SWD #1 well.

Well Name: Central Basin SWD #1
Total Depth: 7,725'
Proposed Disposal Zone: Bluff/Entrada (7,222' to 7,617')
Location: 690' FSL & 1727' FWL Section 09, T28N R13W, San Juan County, NM
Applicant Name: Energen Resources Corporation
Applicant's Address: 2010 Afton Place, Farmington, NM 87401

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

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

AN ENERGEN COMPANY

Figure 22: Notification of C108 sent to BP America.

AFFIDAVIT OF PUBLICATION

Ad No. 55919

STATE OF NEW MEXICO
County of San Juan:

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

Friday, November 16, 2007

And the cost of the publication is $52.97

Bob Waller

ON 11/19/07 BOB WALLER appeared before me, whom I know personally to be the person who signed the above document.

Wynell Casey

My Commission Expires November 17, 2008

COPY OF PUBLICATION

Energen Resources Corporation is applying to drill the Central Basin SWD #1 water disposal well. The well will be located at 690' FSL 1727' FEL, Section 9 T. 28 N R. 13W, San Juan County, New Mexico. The well will dispose produced water from oil and gas wells located in San Juan County New Mexico into the Bluff/Entrada Formation at a depth of 7,222' to 7,617' at a maximum rate of 3,000 barrels per day and a maximum pressure of approximately 1,800 psig. Interested parties must file objections or request for hearing with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within 15 days of this add.

Additional information may also be obtained by contacting:

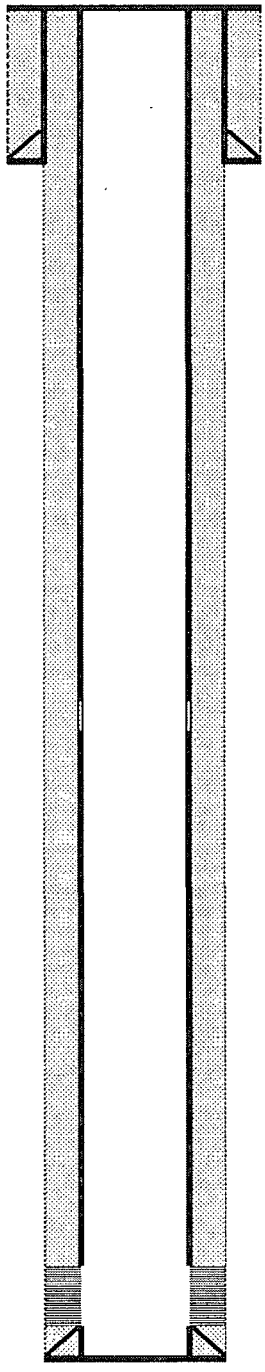
Energen Resources Corporation
2010 Afton Place
Farmington, New Mexico 87401
Telephone: 505.325.6800
Attention: Mr. Kirt Snyder

Legal No. 55919 published in The Daily Times, Farmington, New Mexico on Friday November 16, 2007

Figure 23: Legal ad that ran in the Farmington Daily Times newspaper on Friday November 16 with the receipt.

CJ Holder 17

Location: C Sec. 16 T28N R13W 1120' FNL, 1630' FWL
GL Elevation: 6057'



Surface Casing: 8-5/8" set at 323'
Hole Size: 12-1/4"

Spud Date: 12/29/1984

Completion: 2/1/1985 Fraced w/100,000# sd & 64,200 gals 30# Gel

Fruitland Top @ 1400'
Pictured Cliffs Top @ 1700'

Mesaverde Top @ 2620'

Stage Tool @ 2896'

Production Casing: 4-1/2" set at 6570'
TOC: Surface
PBTD: 6430'
Hole Size: 7 7/8"
TD: 6570'

Gallup Top @ 5355'

Dakota Top @ 6280'

Perforations @ 6302'-6396'

Figure 2: Wellbore diagram of active gas well.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
NOV 27 2007
Bureau of Land Management
Farmington Field Office

5. Lease Serial No.
NMSF-077968

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

8. Well Name and No.
Central Basin SWD #1

2. Name of Operator
Energen Resources Corporation

9. API Well No.
30-045-34426

3a. Address
2198 Bloomfield Highway, Farmington, NM 87401

3b. Phone No. *(include area code)*
(505) 325-6800

10. Field and Pool, or Exploratory Area
Entrada

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
690 ~~fnl~~ fsl, 1727 fwl

11. County or Parish, State
San Juan NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☒ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Due to regulatory requirements, Energen Resources would like to deepen the Central Basin SWD #1 to include the target total depth formation of the Chinle Formation. The revised proposed TD of the well will be 7725'.

The following casing strings and depths will be revised as follows:

*Intermediate Casing: Change from 7" to 7 5/8" 26.4 ppf N-80 LT&C. Cement with 250 sacks (338 cuft) cement for the first stage, and 375 sacks (673 cuft) cement for the second stage.'

*Liner: 5 1/2" 17 ppf N-80 LT&C. Cement with 475 sacks (1149 cuft) cement.

Attached is a revised Operations Plan.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Nathan Smith

Title
Drilling Engineer

Date 11/27/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L. Salyers

Title PE

Date 11/28/2007

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office FFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMSF-077968

1a Type of Work: [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name

1b Type of Well: [ ] Oil Well [ ] Gas Well [X] Other SWD [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No

2 Name of Operator
Energen Resources Corporation

8. Lease Name and Well No.
Central Basin SWD #1

3a Address
2198 Bloomfield Highway Farmington, New Mexico 87401

3b. Phone No. (include area code)
(505) 325-6800

9. API Well No
30-045-34426

4. Location of Well (*Report location clearly and in accordance with any State equirements*)*
At surface 690 fsl, 1727 fwl
At proposed prod. zone

10. Field and Pool, or Exploratory
Mesa Verde, 96160

11. Sec., T., R., M., or Blk. and Survey or Area
(N) Sec 9, T28N, R13W

14 Distance in miles and direction from nearest town or post office*
4 miles south of Farmington

12. County or Parish: San Juan
13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
690'		RCVD NOV 13 '07 OIL CONS. DIV.
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft: 50'	19. Proposed Depth: 4645'	20. BLM/BIA Bond No. on file: NM2707 DIST. 3
21 Elevations (Show whether DF, KDB, RT, GL, etc.): 6015' GL	22. Approximate date work will start*: 11/15/07	23. Estimated duration: 25 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (*Printed/Typed*)	Date
	Nathan Smith	9/11/07
Title: Drilling Engineer		
Approved by (Signature)	Name (*Printed/Typed*)	Date: 11/8/07
Title: AFM	Office: FRO	

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2) C.O.A. Obtain S.W.D. order From NM OCD

* See Federal COA

RECEIVED
SEP 12 2007
Bureau of Land Management
Farmington Field Office

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

NMOCD NOV 20 2007

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Hicks Oil & Gas Inc
PO Drawer 3307
Farmington NM 87499

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) [illegible]

C. Date of Delivery 11/15/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3307

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 1490 0000 5397 2598

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

T.H. McElvain Oil & Gas
1050 17th Street, Suite 1800
Denver CO 80265

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

NOV 19 2007

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 1490 0000 5397 2604

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

AFFIDAVIT OF PUBLICATION

Ad No. 55919

STATE OF NEW MEXICO
County of San Juan:

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

Friday, November 16, 2007

And the cost of the publication is $52.97

Bob Waller

ON 11/19/07 BOB WALLER appeared before me, whom I know personally to be the person who signed the above document.

Wynell Casey

My Commission Expires November 17, 2008

COPY OF PUBLICATION

Energen Resources Corporation is applying to drill the Central Basin SWD #1 water disposal well. The well will be located at 690' FSL 1727' FEL, Section 9 T. 28 N R. 13W, San Juan County, New Mexico. The well will dispose produced water from oil and gas wells located in San Juan County New Mexico into the Bluff /Entrada Formation at a depth of 7,222' to 7,617' at a maximum rate of 3,000 barrels per day and a maximum pressure of approximately 1,800 psig. Interested parties must file objections or request for hearing with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within 15 days of this add.

Additional information may also be obtained by contacting:

Energen Resources Corporation
2010 Afton Place
Farmington, New Mexico 87401
Telephone: 505.325.6800
Attention: Mr. Kirt Snyder

Legal No. 55919 published in The Daily Times, Farmington, New Mexico on Friday November 16, 2007

ENERGEN
RESOURCES

RECEIVED
2007 DEC 10 AM 9 55

Memorandum

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

December 7, 2007

Mr. William V. Jones PE,

The attached documents include the administrative application checklist, C-108, approved APD, and the sundry to deepen for the Central Basin SWD #1. The API number is 30-045-34426.

Well Location;
Sec. 09 T28N R13W
690' FSL, 1727' FWL

We ask if possible that you process the C-108 and when able to approve based on completeness and regulatory time limit that NMOCD issue the Authority to Inject. The memo taken to the BLM stamped Received has been attached to the C-108. All the notifications have been sent to the proper authorities.

Thank You,

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

Jones, William V., EMNRD

From: Kirt Snyder [Kirt.Snyder@energen.com]
Sent: Friday, December 07, 2007 11:28 AM
To: Jones, William V., EMNRD
Subject: RE: Central Basin SWD #1 Injection Permit
Attachments: APD and sundry.pdf

Mr. Jones,

Here is the API# 30-045-34426 and an attached copy of the approved APD along with the sundry to deepen. I am putting another two copies together of everything for you. I will send them this afternoon, overnight. It will be there tomorrow.

Thank You,

Kirt Snyder
Production Engineer
Energen Resources
Farmington, NM
Cell: (505) 793-7614
Direct: (505) 566-4689
Fax: (505) 326-6112

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Friday, December 07, 2007 11:14 AM
To: Kirt Snyder
Subject: RE: Central Basin SWD #1 Injection Permit

Hey Kirt:
I found the first submittal and remember you decided to drill the well deeper and I have something logged in on Nov 15, 2007 from you - but there is NO API number and I have no paperwork pending on my desks.

Please send another copy of your new C108 submittal for the Entrada injection interval with the API number and the well location clearly marked on it and address it to me in the Engineering Bureau in Santa Fe.

Our system needs the API number - so don't send until you get it.

You can drill the well and equip it prior to getting a permit to inject.

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

From: Kirt Snyder [mailto:Kirt.Snyder@energen.com]
Sent: Friday, December 07, 2007 9:58 AM
To: Jones, William V., EMNRD
Subject: RE: Central Basin SWD #1 Injection Permit

Thanks for the update Will. When you get around to my permit let me know if there is anything you need. It's not on the website

Jones, William V., EMNRD

From: Kirt Snyder [Kirt.Snyder@energen.com]
Sent: Wednesday, January 09, 2008 2:54 PM
To: Jones, William V., EMNRD
Subject: RE: SWD Application from Energen: Central Basin SWD #1 30-045-34426 690FSL 1727FEL Sec 9 T28N R13W
Attachments: Entrada.doc; Certified Mail BHP, Con, Chev.pdf; Notification BHP, Con, Chev.pdf

Mr. Jones,

The answer to your question 1) is in the attached document titled Entrada. This was written by Robert Fleenor, the Geologist that works the Entrada formation for Energen Resources.

I checked with the Land department about the mineral owners for the Entrada, and I have sent out new notifications to BHP Billiton Americas, Conoco Phillips Company, and Chevron Mid Continent, LP. The notification letters and certified mail receipts are attached and have been sent to the companies as of January 9, 2008. I will send the returned certified mail receipts when they arrive.

I had previously notified Hicks Oil & Gas Co, BP America, and T H McElvain. You have those certified mail receipts and Notification letters with the C108 I submitted.

We have now fully complied with rule 701B(2). Every operator and Mineral lease holder has been notified for the 1/2 mile AOR.

If there are any more questions please contact me,

Thank You,

Kirt Snyder
Production Engineer
Energen Resources
Farmington, NM
Cell: (505) 793-7614
Direct: (505) 324-4142
Fax: (505) 326-6112

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, January 08, 2008 1:33 PM
To: Kirt Snyder
Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD; Hayden, Steven, EMNRD
Subject: SWD Application from Energen: Central Basin SWD #1 30-045-34426 690FSL 1727FEL Sec 9 T28N R13W

Hello Kirt:
Thank you for your application - very thorough. Couple of questions before we release this.

1) I understand the Entrada is rarely productive, but to cover all bases: You say the Entrada is not productive within 2 miles. Would you have your geologist and/or engineer send a quick paragraph or so explaining why it is unlikely to be productive here, even if it is a high watercut?

2) Your application is very thorough and says the Entrada is FEE owned, but I did not see any statement that Energen had a Mineral Lease from these Fee owners in the Entrada. Please check with your Landmanagers and let me know if that is the case.

3) The rules for notice are in Division Rule 701B.(2) - please read this rule and let me know if the requirements have been complied with. Within this wellsite and even within the 1/2 mile radial AOR, if the ownership is Fee and Energen does NOT have a Mineral Lease covering

The Entrada is a thick, Jurassic age, sandstone that, along with the Bluff formation, has been a common deep injection zone in the central part of the San Juan Basin. Currently, there is no oil or gas production from the Entrada in the central basin; the only Entrada production comes from a small oil play on the southernmost edge of the basin, approximately 50 miles away. All other Entrada completions north of township 22N are for injection purposes only. The producing reservoir to the south is a sub-aerial, barchan dune depositional environment that is not present in the central basin. The absence of these particular reservoirs, along with the lack of any significant evidence of hydrocarbon on wireline or mud logs, indicates that there is no substantial economic hydrocarbon potential from the Entrada in the central part of the San Juan Basin.

7005 1820 0002 8596 7187

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

Central Basin SWD #1

Postage	$ 1.82
Certified Fee	4.80
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.62

1.82
4.80
Postmark Here

Sent To: BHP Billiton Americas
Street, Apt. No.; or PO Box No.: 1360 Post Oak Blvd, Suite 500
City, State, ZIP+4: Houston TX 77056

PS Form 3800, June 2002 — See Reverse for Instructions

7005 1820 0002 8596 7170

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
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Central Basin SWD #1 OFFICIAL USE

Postage	$ 1.82
Certified Fee	4.80
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.62

Postmark Here

Sent To: Chevron Mid Continent, LP
Street, Apt. No.; or PO Box No.: PO Box 36366
City, State, ZIP+4: Houston TX 77236

PS Form 3800, June 2002 — See Reverse for Instructions

7005 1820 0002 8596 7194

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Central Basin SWD #1 USE

Postage	$ 1.82
Certified Fee	4.80
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.67

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Sent To: Conoco Phillips Company
Street, Apt. No., or PO Box No.: PO Box 4289
City, State, ZIP+4: Farmington NM 87499

PS Form 3800, June 2002 — See Reverse for Instructions

ENERGEN
RESOURCES

Certified Mail 7007 1820 0002 8596 7194

Conoco Phillips Company
PO Box 4289
Farmington, NM 87499

January 9, 2008

As required by the New Mexico Oil Conservation Division Rules, I am notifying you of the following proposed water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Energen Resources Corporation is applying (see attached application) to drill its Central Basin SWD #1 well.

Well Name: Central Basin SWD #1
Total Depth: 7,725'
Proposed Disposal Zone: Bluff/Entrada (7,222' to 7,617')
Location: 690' FSL & 1727' FWL Section 09, T28N R13W, San Juan County, NM
Applicant Name: Energen Resources Corporation
Applicant's Address: 2010 Afton Place, Farmington, NM 87401

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

Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

ENERGEN
RESOURCES

Certified Mail 7005 1820 0002 8596 7170

Chevron Mid Continent, LP
PO Box 36366
Houston, TX 77236

January 9, 2008

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Please call me if you have any questions.

Sincerely,

Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

ENERGEN
RESOURCES

Certified Mail 7005 1820 0002 8596 7187

BHP Billiton Americas
1360 Post Oak Blvd, Suite 500
Houston, TX 77056

January 9, 2008

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Kirt Snyder
Production Engineer
Energen Resources Corporation
2010 Afton Place
Farmington NM 87401
(505) 325-6800
ksnyder@energen.com

Injection Permit Checklist 2/8/07

SWD Order Number 1106 Dates: Division Approved _____ District Approved _____

Well Name/Num: Central Basin SWD #1 Date Spudded: Dcw

API Num: (30-) 045-34426 County: San Juan

Footages 690 FSL / 1727 FEL Sec 9 Tsp 28N Rge 13W Fee Lease

Operator Name: ~~KIRT SNYDER~~ Elm Ridge Res. Corp. Contact KIRT SNYDER

Operator Address: ~~PO~~ 2010 AFTON PL Farmington NM 87401

Current Status of Well: Not Drilled Planned Work: Drill Inj. Tubing Size: 3½ @ 7150'

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	12¼ 9⅝	600'	350 sx	CIRC
Intermediate	8¾ 7⅝	4645'	625 sx in 2 Stgs (Stage Collar @ 3000')	CIRC BOTH
~~Liner~~ Production	7⅞ 5½	4400-7725'	675 sx	4400'
Last DV Tool				
Open Hole/Liner				
Plug Back Depth		7725'		

Diagrams Included (Y/N): Before Conversion — After Conversion ✓

Checks (Y/N): Well File Reviewed _____ ELogs in Imaging Not Drilled Yet

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/Potash			
Capitan Reef			
Cliff House, Etc:			
Formation Above			
Top Inj Interval	7222	~~Entrada~~ / Bluff	
Bottom Inj Interval	7617	Entrada Bottom	
Formation Below			

BLM owns Surface

1444 PSI Max. WHIP

NO Open Hole (Y/N)

NO Deviated Hole (Y/N)

Fresh Water: Depths: 0-730' Wells(Y/N) ~~Yes~~ NO Analysis Included (Y/N): NO Affirmative Statement ✓

Salt Water Analysis: Injection Zone (Y/N/NA) Yes DispWaters (Y/N/NA) No Types: FRC

Notice: Newspaper(Y/N) _____ Surface Owner BLM Mineral Owner(s) Fee

Other Affected Parties: _____

AOR/Repairs: NumActiveWells 0 Repairs? — Producing in Injection Interval in AOR NO

AOR Num of P&A Wells 0 Repairs? — Diagrams Included? — RBDMS Updated (Y/N) _____

Well Table Adequate (Y/N) ___ AOR STRs: Sec_____Tsp_____Rge_____ UIC Form Completed (Y/N) _____

New AOR Table Filename _____ Sec_____Tsp_____Rge_____ This Form completed _____

Conditions of Approval: Sec_____Tsp_____Rge_____ Data Request Sent _____

Swab Test

Run Open Hole Induction / Porosity

Mud Log

AOR Required Work: _____

Required Work to this Well: _____