

pKRV0202429338

AMEND SWD-755 1/15/02

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 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance X Disposal _____ Storage
Application qualifies for administrative approval? X Yes _____ No
- II. OPERATOR: El Paso Energy Raton, L.L.C.
ADDRESS: PO BOX 190
CONTACT PARTY: Donald R. Lankford PHONE: 505- 445-6721
- 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? X Yes _____ No
If yes, give the Division order number authorizing the project: SWD-755
- 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.).
- DEC 31 2001
- *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: Donald R. Lankford TITLE: Petroleum Engineer

SIGNATURE:  DATE: 12/28/01

* 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

El Paso Energy Raton, L.L.C.
Vermejo Park Ranch "A", Well #7 Water Disposal
1074' FNL & 2276' FEL
Section 1, T-31N, R 19E
Colfax County, New Mexico

(30-007-20116)

Attachment A

III. WELL DATA

Section A:

1. Leave Name: Vermejo Park Ranch "A". Well #7 (Water Disposal)
Location: 943' FNL & 1,829' FEL, Sec 1, T31N, R19E, Colfax County, NM
2. Casing & Cementing (Drilling Procedure and Wellbore /Well Location Schematic Attached)
3. Tubing: 3 1/2" / 2 7/8, N-80, Butt IPC @ +/- 6310'
4. Packer: 5" x 2" Nickel Plated Loc Set w/ Carbide Slips @ +/- 6310'

Section B:

1. Injection Formation: The Dakota/Purgatorie, Entrada and Glorieta Sandstone
Field Name: Vermejo Park Ranch
2. Injection Interval: Dakota/Purgatoire 6,400' to Glorieta 7,420'
3. The Original Purpose of Well: Drilled for the purpose of disposing of produced formation water. Deepening this well thru Glorieta sands will increase the disposal capacity from 2,500 bpd to 18,000 bpd.

IV. This is an expansion of an existing project.

V. Map Attached - "Attachment B", two mile & 1/2 mile radius area of review.

VI. Area of Review: "Attachment C"

There is one Water Disposal Well (VPR A 42) within one half mile of the proposed disposal well that is currently injecting produced water into the Entrada and Glorieta.

VII. Operation Data:

1. Proposed average daily injection volume: 18,000 BWPD
Proposed maximum daily injection volume: 18,000 BWPD
2. This well will be a closed system.
3. Proposed average daily injection pressure: 2,000 psi
Proposed maximum daily injection pressure: 2,000 psi

4. Sources of injection/disposal water will be from the Vermejo and Raton Formation CBM wells that have been drilled or are scheduled to be drilled on the Vermejo Park Ranch.
5. Chemical analysis of water zones will be obtained by Baker Petrolite Laboratories and Roy Johnson, District 4, Oil Conservation Division, Santa Fe, NM.

> Fat Chance
RJD

VIII. Geological Data (Geologic Well Prognosis Report) – "Attachment D"

Information pertaining to the lithological details and thickness have been estimated based on the VPR A 42 well, located in Section 5, T31N, R19E.

IX. Stimulation Program

Anticipated frac job will be 250,000 # of 16/30 sand.

X. Logs and Test Data

Well has been logged to date; the Oil Conservation Division, Att: Roy Johnson, Santa Fe, NM, is on the distribution list for all logs.

XI. Fresh Water

Roy Johnson, OGCD, will take fresh water samples during drilling.

> Fat Chance
RJD

XII. Statement

To the best of our current knowledge of the area, there is no evidence of open faults or other hydrologic connection between and disposal zone and underground sources of drinking water.

XIII. Proof of Notice attached as "Attachment E"

El Paso Energy Raton, L.L.C. offsets Section 1 on all sides.

XIV. Certification: Form C-108 "Application for Authorization to Inject".

VPR A 7 WDW
South Canadian
Colfax County, New Mexico

Drilling Procedure

Engineer	Office Phone	Cell	Home
Bill Ordemann	(505) 445-6724	(505) 447-1399 & (505) 447-1401	(505) 445-2856

Objective: Deepen the A 7 water disposal well in the South Canadian Pod to inject 18,000 bpd field produced water.

Status: The A 7 WDW was drilled in the summer of 1999 to 6620' and cased with 5", 18 ppf, P110 liner inside 7", 23 ppf, J-55 casing. Due to drilling problems the well was TD'd below the Dakota sandstone and completed in the Dakota. Deepening this well thru the Entrada and Glorietta sands will increase the disposal capacity from 2500 bpd to 18,000 bpd.

CURRENT WELL DATA

Material	Description	Depth	Burst (100%)	Rating SF (80%)
Surface Casing	13 3/8", 48 ppf, H-40, 12.559" Drift/14.375" OD	350'	1730	
Intermediate Casing	9 5/8", 36 ppf, J-55, 8.765" Drift/10.625" OD	2662'	3520	
Production Casing	7 ", 23 ppf, J-55, 6.241" Drift/7.656" OD	5745'	4360	
Casing Liner	5", 18 ppf, P-110, 4.151" Drift/5.563" OD	6619'	13940	
On/Off Tool	3 3/4" nickel plated on/off tool w/1.875" F profile	6310'		
Packer	5" x 2" nickel plated Loc Set w/ carbide slips	6310'		
Tubing	3 1/2"/2 7/8", N-80, Butt IPC	6310'		

PROPOSED WELL DATA

Material	Description	Depth	Burst (100%)	Rating SF (80%)
Surface Casing	13 3/8", 48 ppf, H-40, 12.559" Drift/14.375" OD	350'	1730	
Intermediate Casing	9 5/8", 36 ppf, J-55, 8.765" Drift/10.625" OD	2662'	3520	
Production Casing	7 ", 23 ppf, J-55, 6.241" Drift/7.656" OD	5745'	4360	
Casing Liner	5", 18 ppf, P-110, 4.151" Drift/5.563" OD	6619'	13940	
Casing Liner II	3 1/2", 8.81 ppf, L-80, 2.867" Drift/3.5" Flush Jt OD	7470'	10160	
On/Off Tool	3 3/4" nickel plated on/off tool w/1.875" F profile	6310'		
Packer	5" x 2" nickel plated Loc Set w/ carbide slips	6310'		
Tubing	3 1/2"/2 7/8", N-80, Butt IPC	6310'	10160	

PROPOSED FORMATION DATA

Formation	Interval	Form. Press.	Gun Size	Type	Charges
Raton Coals	350'	N/A			
Vermejo Coals	2229'	N/A			
Trinidad Sand	2460'	N/A			
Pierre Shale	2548'	N/A			
Graneros Shale	6150'	N/A			
Dakota Sand	6400'	N/A			
Morrison Sand	6570'	N/A			
Entrada Sand	6940'	N/A			
Dockum	7040'	N/A			
Glorietta	7320'	N/A			

VENDOR DATA

Service	Vendor	Location	Contact	Phone
Cement	Halliburton	Trinidad	Bob Eales	(719) 846-3132
Open Hole Logging	Schlumberger	Fort Morgan	Harvey Greenwood	(970) 768-2584
Ditch Drainage System	Tri County Servies	Oklahoma	Jason Swanson	(580) 938-2915
Roustabout Service	Chavez	Trinidad	Kieth Mantelli	(719) 868-2215
Mud & Chemicals	Baroid	Farmington	Mike Athison	(505) 325-1896
Drill String Inspection	TICO	Canadian, OK	Jeff Hohertz	(806) 323-6935
Bits	Rock Bit Int.	Liberal, KS	Ed Fuller	(405) 834-4857
Drill String Rental	Weatherford	Liberal, KS	Tom Steers	(620) 624-6273
Rentals	Weatherford	Elk City, OK	Bruce Byerly	(580) 225-1229
Packer	Packer Sales	Odessa, TX	Clyde Hinton	(915) 557-7963
Flush Joint Liner	Curley's	Odessa, TX	Butch Gilliam	(915) 580-6607
Liner Hanger	Smith Tool	Casper	Brian Rewinkel	(888) 988-1800
Welding, Wtr&Trucking	Ray's Fld Service	Raton	Ray Luksich	(505) 445-5972

General Notes

- Notify Roy Johnson at the New Mexico Energy, Minerals and Natural Resources Department prior to project startup and prior to running each string of casing. Office (505) 476-3470; Cell (505) 690-2365; Home (505) 471-1068.
- All El Paso Energy and Vermejo Park Ranch safety and environmental regulations will be adhered to at all times. Failure to do so will not be tolerated. Each person to be working on the Ranch must view the training vidio and read the pocket handbook prior to startup.
- Location will require a ditch drainage system to ensure oil and diesel do not end up in the pit.
- Pipe and equipment for this hole will be stored at the Raton Yard.

Rig

MIRU _____ Rig with full air package (3 compressors and a booster capable of 2500 cfm @ 800 psi) and 2 mud pumps. Rig must be capable of drilling to 9000' (approx 700 Hp), have available a fully contained mud system with solids control equipment and have available a full range of **inspected** drillstring including a 2 7/8" drillstring. The operator may elect to inspect the drillstring at any time during the operation.

All equipment will need drip pans or plastic placed under the engines to catch any leaking oil.

Squeeze Dakota Sandstone Perforations

1. MIRU CU. PU 3 1/2" tubing 1000 to 2000 lbs over string weight and rotate 6-8 rounds to the right to release Loc Set packer. TOOH laying down tubing and packer.
2. PU 4" bit and scraper on 2 7/8" workstring and TIH to PBTD. Go slow when you get near the liner top to keep from damaging workstring. TOH and lay down bit and scraper.
3. PU EZSV Cement Retainer on 2 7/8" workstring and TIH. Set retainer above Dakota perforations @ 6200'. RU HES Cement truck. Sting out of retainer and pressure test EZSV to 500 psi. Mix and pump cement squeeze into Dakota perforations from 6400'-6564' (244 perforations) per HES procedure. If no squeeze pressure is encountered, over displace retainer and plan to squeeze again after WOC.
4. Sting out of retainer and POH 6-8 joints and circulate hole clean with production water. TOH and lay down tubing and packer assembly. WOC a minimum of 8 hrs or HES recommended time.
5. RU Power swivel and reverse circulating unit. PU 4 1/8" bit and 6-3 1/8" drill collars and TIH. Drill out cement and EZSV. Pressure test squeeze perfs to 500 psi. If squeeze perfs hold, swab well dry and check for inflow from Dakota perforations (swab well dry and wait one hour, swab well again).

Production Liner

- Obtain samples of water produced as we drill thru the Morrison, Entrada and Glorieta formations. Label (time, date, depth, well, drilling conditions ie air/mist/hvy wtr) and turn in samples to drilling engineer in Raton field office.
1. MIRU Drill Rig. PU 4 1/8" bit and 6-3 1/8" drill collars on 2 7/8" PAC (3 1/8" OD collar, 2 7/8" tube) drill pipe. Unload the hole. Drill with air/mist with gel sweeps as needed to a TD of 7470' or 150' below the base of the Glorietta Sand. Geologist Mike Korte will assist us in picking TD (405) 706-6625. At TD double the dose of Quick Foam and Barcat in the mist tank and circulate the hole with air for 30 minutes. Consult with Mike Acthison with Baroid for additive volumes: office(505) 325-1896; cell (505)320-8407; home (505) 632-7191.
 2. RU casing crew and run 3 1/2" flush joint casing. Run a guide shoe on bottom with a float collar one joint above. Threadlock the guide shoe and both sides of the float collar. Put one centralizer every 120' for 900' (7 centralizers). We will run the liner with 200' of overlap into the 5' casing. The cement volume should also factor in a 200' cement cap on top of the liner in the 5' casing. **Do not attempt to load the hole** with fluid/mud prior to running casing.

3. Install the liner per Smith Inc. instructions. TIH with 2 7/8" PAC drill pipe (rabbit drill pipe as it is picked up) to TD. Run liner assembly slowly, clearances are tight.
4. RU Halliburton and cement per the attached Cementing Procedure. When plug has been bumped, release from the liner and pull 1000' of drill pipe. Load the hole with water and circulate to assure no cement is left around the drillpipe. (Cement Requirements: 3 1/2"x5" annulus = .0500 cuft/ft x 270' = 14 cuft 14 cuft/2.04 cuft/sk = 7 sks; 4 1/8" x 3 1/2" annulus = .0260 cuft/ft x 750' x 1.4 excess = 27 cuft 27 cuft/2.04 cuft/sk = 13 sks; Total cement required 20 sks.)
5. TOH laying down 2 7/8" PAC drill pipe.
6. RD Drilling Rig and move to E-34 WDW location.

Completion

1. MIRU CU. RU Power Swivel and reverse circulating unit. PU 4" bit and 6 - 3 1/2" drill collars on 2 7/8" PAC (3 1/8" OD collars, 2 7/8" OD tube) drill pipe and drill cement to the top of the liner. PU liner mill and 3 1/2" drill collars on 2 7/8" PAC drill pipe and dress the top of the liner. PU 2 7/8" bit, 1100' of 1 1/2" drill pipe coupled to 2 7/8" PAC drill pipe. Tag liner top gently ensuring we do not buckle drillstring. Drill cement to PBTD (10' above float collar).
2. RU Patterson and run cased hole Gamma Neutron log.
3. See completion procedure to follow.

WELLBORE SCHEMATIC

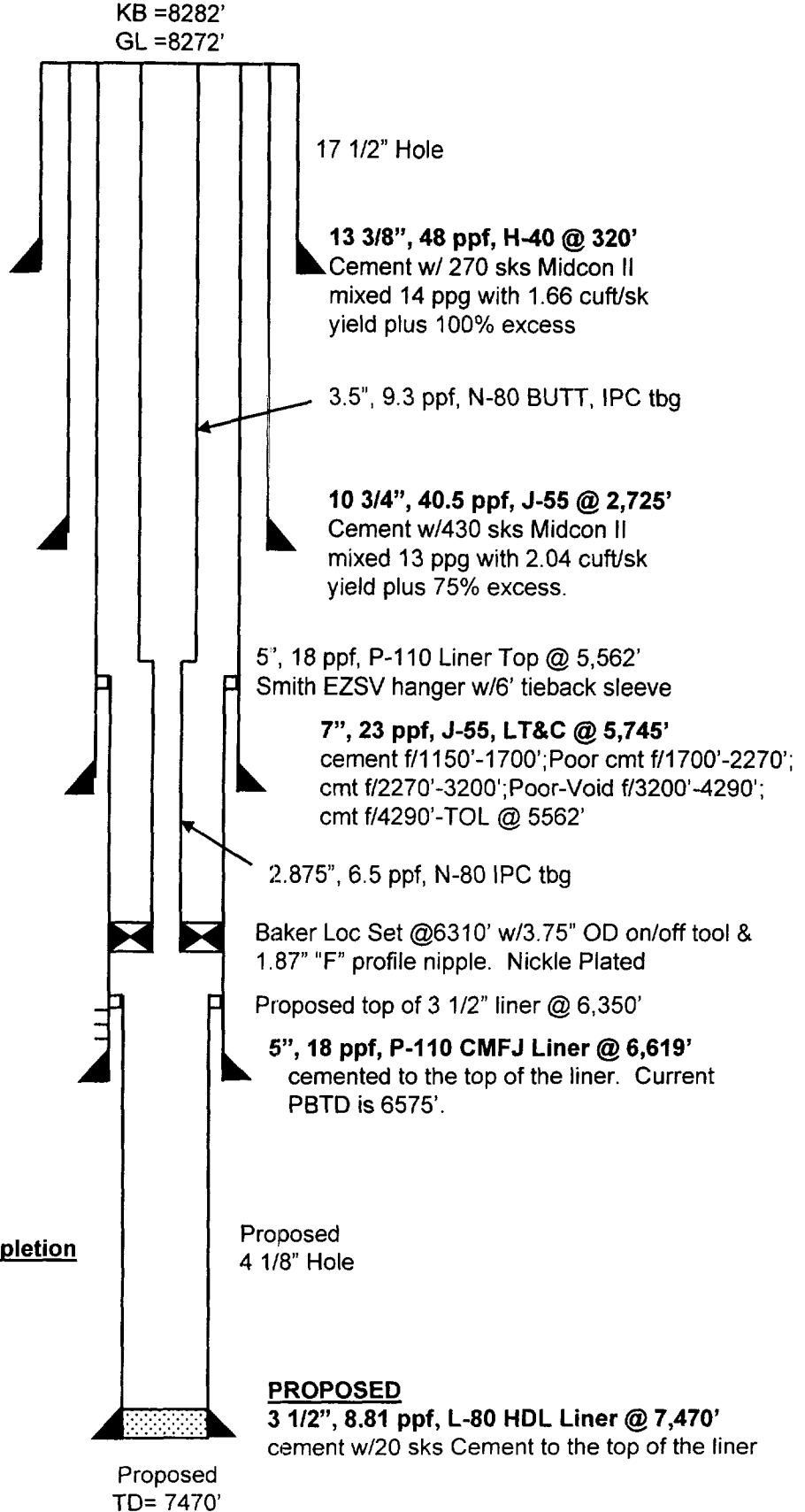
Lease: VPRA 7 WDW
Field: VPR - Canadian River
County: Colfax
State: New Mexico
Complete: 6/99

Current Dakota Sand Perforations

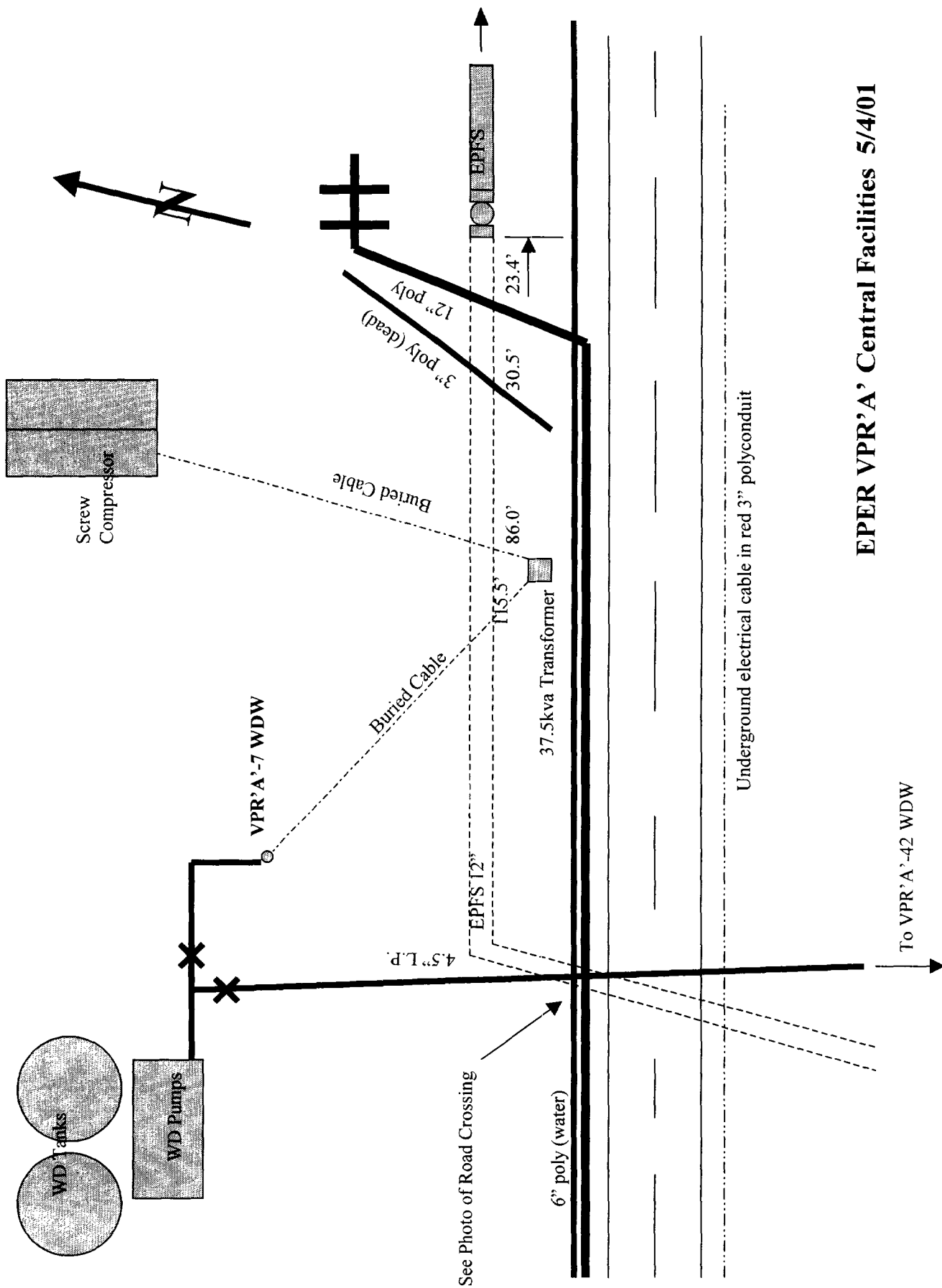
6400'-6429'	29'	60 holes
6438'-6456'	18'	38 holes
6466'-6510'	44'	90 holes
6522'-6528'	6'	14 holes
6544'-6564'	20'	42 holes

Injection Zones Proposed for Completion

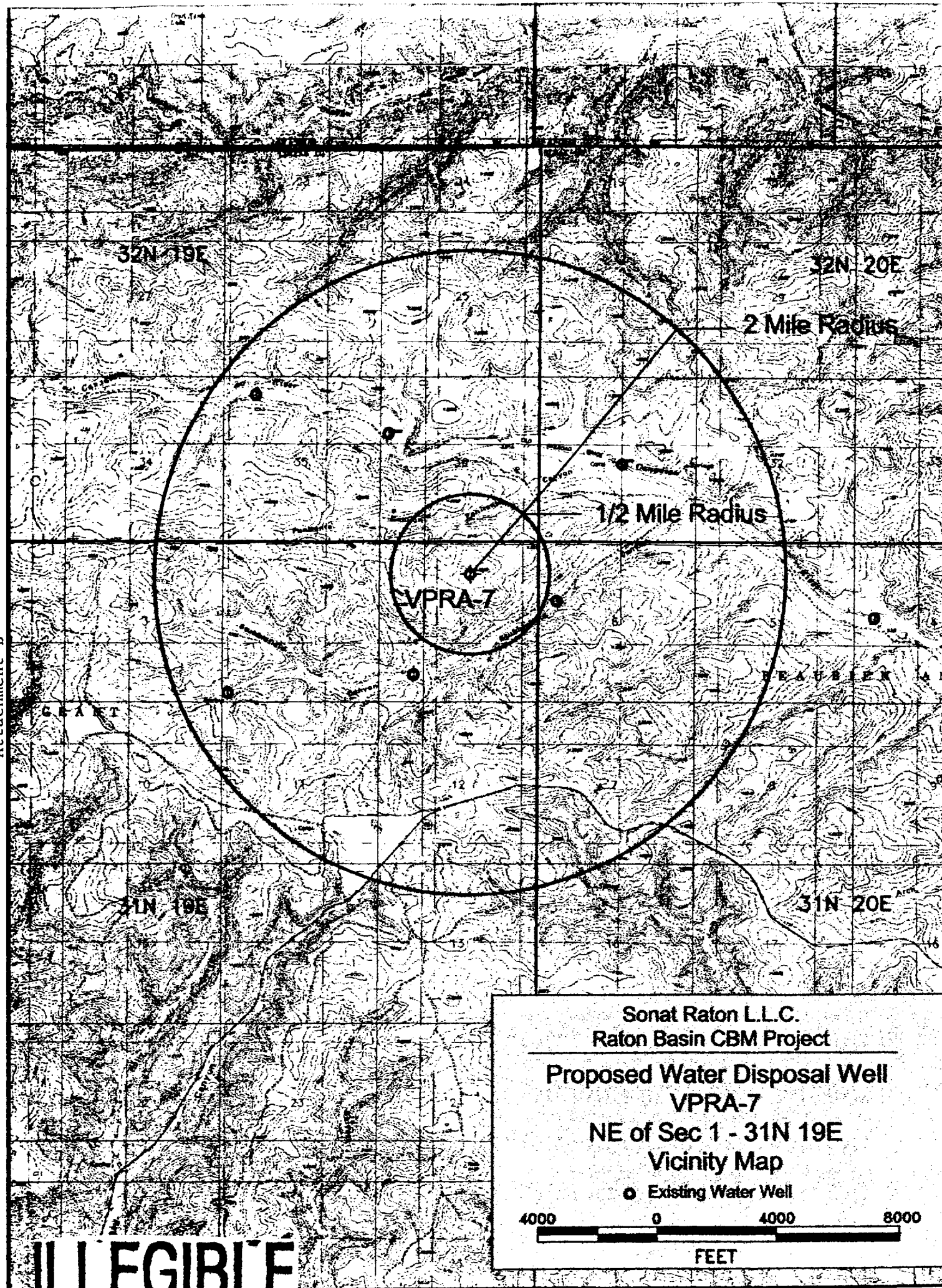
Dakota	6400'-6590'
Entrada	6940'-7040'
Glorieta	7320'-7420'



Prepared by: William M. Ordemann
Date: December 19, 2001



EPER VPR'A' Central Facilities 5/4/01



Sonat Raton L.L.C.
Raton Basin CBM Project

Proposed Water Disposal Well
VPRA-7
NE of Sec 1 - 31N 19E
Vicinity Map

● Existing Water Well

4000 0 4000 8000
FEET

WELL API NO. 30-007-20143

5. Indicate Type of Lease

STATE ☐ FEE ☒

State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER COALBED METHANE ☐

b. Type of Completion:
NEW WELL ☐ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER INJECTION ☐

2. Name of Operator
SONAT RATON, LLC

3. Address of Operator
P.O. BOX 190, RATON, NM 87740

7. Lease Name or Unit Agreement Name
VPR 'A'

8. Well No 42

9. Pool name or Wildcat

4. Well Location

Unit Letter F 1619 Feet From The NORTH Line and 2511 Feet From The WEST Line

Section 01 Township 31N Range 19E NMPM COLFAX County

10. Date Spudded 02/05/00	11. Date T.D. Reached 05/19/00	12. Date Compl. (Ready to Prod.) 05/26/00	13. Elevations (DF, RB, RT, GR, etc.) 8289' (GR)	14. Elev. Casinghead 8289'
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15. Total Depth 7459'	16. Plug Back T.D. open hole	17. If Multiple Compl. How Many Zones? 0	18. Intervals Drilled By Rotary Tools 0 - TD	Cable Tools NONE
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19. Producing Interval(s), of this completion - Top, Bottom, Vermejo INJECTION WELL	20. Was Directional Survey Made NO
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21. Type Electric and Other Logs Run Density Log, Induction Log, CBL, Spectra Scan, Micro Log, Shallow Electric Log	22. Was Well Cored NO
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23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48#	360'	17 1/2"	100 sx	NONE
10 3/4"	40.5#	2482'	12 1/4"	340 sx	
7 5/8"	29.7#	5396'	9 7/8"	300 sx	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
4 1/2	4470'	6878'	300 sx.		4 1/2"	4470'
2 7/8	6768'	7459'	N/A	Slotted		

26. Perforation record (interval, size, and number) Slotted liner 6768' - 7459"	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
		No stimulation performed

28. PRODUCTION

Date First Production 06/01/00		Injection of produced water			Well Status (Prod. or Shut-in) Prod. Water disposal well	
Date of Test 06/01/00	Hours Tested 24 hrs.	Choke Size full 2"	Prod'n For Test Period injection	Oil - Bbl N/A	Gas - MCF N/A	Water - Bbl 5700 BPD
Flow Tubing Press. (inject) 180 psi.	Casing Pressure 0 psi	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold, used for fuel N/A	Test Witnessed By L. Casey
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30. List Attachments

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

Signature DR Lankford Printed Name DON LANKFORD Title SR. PETROLEUM ENGINEER Date 06/20/00

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATI

Southeastern New Mexico

Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T. Raton – Surface_300'
T. Blinébry	T. Gr. Wash	T. Morrison	T. Vermejo – see attached
T. Tubb	T. Delaware Sand	T. Todilto	T. Trinidad –
T. Drinkard	T. Bone Springs	T. Entrada	T. Pierre –
T. Abo	T.	T. Wingate	T.
T. Wolfcamp	T.	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS SANDS OF ZONES

No. 1, from.....to.....
No. 2, from.....to.....
No. 3, from.....to.....
No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

El Paso Energy Raton, LLC GEOLOGIC WELL PROGNOSIS REPORT				DATE: 1/28/00																									
				RIG: Aztec Well Services Rig #124																									
				SUPV: Mark Johnson																									
WELL NAME: VPR A - 42 WDW		API number: 30-007-20143		REPORT BY: Mike Korte																									
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">FIELD</td> <td style="width: 33%;">RATON BASIN CBM PROJECT</td> <td style="width: 10%;">SEC. 1</td> <td style="width: 10%;">TW. 31N</td> <td style="width: 10%;">RANGE 19E</td> <td></td> </tr> <tr> <td>FEET FNL: 1,619</td> <td>FEET FWL: 2,511</td> <td>POD</td> <td>AREA CANADIAN RIVER</td> <td>COUNTY: COLFAX</td> <td>STATE: NM</td> </tr> <tr> <td>ELEV. GL: 8,289</td> <td>SPUD: 2/2/00</td> <td>TD:</td> <td>LOG:</td> <td colspan="2">PROJECT SPECIFIC: WATER DISP. WELL</td> </tr> <tr> <td>MUD LOGGERS:</td> <td>COLUMBINE, 6 3/4"</td> <td>CSG PT. GEOLOGIST:</td> <td>TOM DOUPE</td> <td colspan="2">OP. HOLE LOGGERS: REEVES WIRELINE</td> </tr> </table>						FIELD	RATON BASIN CBM PROJECT	SEC. 1	TW. 31N	RANGE 19E		FEET FNL: 1,619	FEET FWL: 2,511	POD	AREA CANADIAN RIVER	COUNTY: COLFAX	STATE: NM	ELEV. GL: 8,289	SPUD: 2/2/00	TD:	LOG:	PROJECT SPECIFIC: WATER DISP. WELL		MUD LOGGERS:	COLUMBINE, 6 3/4"	CSG PT. GEOLOGIST:	TOM DOUPE	OP. HOLE LOGGERS: REEVES WIRELINE	
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Intermediate 10 3/4"																													
DRILLERS DEPTH:	2,540	12 1/4" bit 21.5 hrs drilling	Surface Csg.:	13 3/8"	Set @: 350 ft.																								
LOGGERS DEPTH:	2,540	2 hrs open hole logs, CDL	Intermediate Csg.:	10 3/4"	Set @: 2540 ft.																								
First significant gas:	1000	subsea: 7289 ft.	Cement Inter. Csg.:		Circ. Cmt.: to surface																								
RATON FM. TOP:	300	subsea: 7989 ft.			Raton fm. CBM (ft.) 40.0																								
VERMEJO FM. TOP:	2,200	subsea: 6089 ft.			Vermejo fm. CBM (ft.) 20.0																								
TRINIDAD FM. TOP:	2,463	subsea: 5826 ft.																											
Intermediate 7 5/8"																													
DRILLERS DEPTH:	6,410	9 7/8" bit 2 days drilling	Intermediate Csg.:	7 5/8"	Set @: 6410 ft.																								
LOGGERS DEPTH:	6,410	4 hrs open hole logs, IND & CDL	Cement Inter. Csg.:		Circ. Cmt.:																								
First significant gas:	4,340	subsea: 3949 ft.	SHALE dark gray to black firm mod. calc, carb with minor sandy shale and tr. bent and pyr																										
PIERRE FM. TOP:	2,550	subsea: 5739 ft.	SHALE AS ABOVE with silty shale normally first gas flow																										
Lower Pierre member:	4,340	subsea: 3949 ft.	dark gray firm hard calcareous shale with minor gray arg ls and sdy sh, tr. bent and pyr																										
NIOBRARA FM. TOP:	5,100	subsea: 3189 ft.	SHALE dark gray calc. firm mica pyr becoming silty in parts, minor arg ls																										
Smokey Hill Member:	5,100	subsea: 3189 ft.	LS tan microcrystalline to chalky limestone and gray calcareous shale																										
Timpas Member:	5,650	subsea: 2639 ft.	SH & SS dark gray carb shale, minor fine grained sandstone with thin beds of black limestone																										
Fort Hayes Member:	5,900	subsea: 2389 ft.	SHALE chalky to limy dark gray calc soft smooth shale with minor ls and calcareous sandy shale																										
BENTON FM TOP:	5,920	subsea: 2369 ft.	SHALE dark gray abnt pyr limy, minor hard crystalline dark gray ls, minor gray calc shale-arg. Ls																										
Codell Member:	5,920	subsea: 2369 ft.	SHALE dark gray to black noncalcareous sli silty, minor bentonite, limestone and silt-fg sandstone																										
Carlile Sh. Member:	5,980	subsea: 2309 ft.	may encounter thin beds of siltstone, brown hard mica carb arg siltstone, minor fg ss																										
Greenhorn Ls. Member:	6,090	subsea: 2199 ft.	drill no more than 10 feet into Dakota SS. Expect 7 5/8" set @ 6410 feet.																										
Graneros Sh. Member:	6,150	subsea: 2139 ft.																											
Dakota silt zone:	6,375	subsea: 1914 ft.																											
DAKOTA FM TOP:	6,400	subsea: 1889 ft.																											
Intermediate 5 1/2"																													
DRILLERS DEPTH:	7,200	6 3/4" bit 2 days drilling	Production Liner:	5 1/2"	Set @: 7200 ft.																								
LOGGERS DEPTH:	7,200	4 hrs open hole logs, IND & CDL	Cement Liner in place:																										
First Injection zone:	6,990	subsea: 1299 ft.	SS med to coarse grained sli calc, silica cement with minor carbonaceous shale, trace of coal																										
DAKOTA FM TOP:	6,400	subsea: 1889 ft.	SS as above A member, mostly crs grained, minor chert conglomeratic ss and carb shale																										
Dakota SS A member:	6,400	subsea: 1889 ft.	SS poorly sorted med-crse conglomeratic quartz grained friable, sli calc.																										
Dakota SS B member:	6,465	subsea: 1824 ft.	Jurassic Age: SH & SS Variegated shales, red green, gray maroon, minor tan hard ls, wh f-m gr ss																										
Purgatoire SS member:	6,520	subsea: 1769 ft.	SS f gr wh to orange mod cmt sli calc glauconitic fspr, minor gypsum, fcn oolitic ls																										
MORRISON FM TOP:	6,610	subsea: 1679 ft.	SS wh -lt gn f-m gr calc. well rd and sorted frsted grains minor uncons SS																										
Wanskah member:	6,960	subsea: 1329 ft.	Triassic Age: SHALE Variegated (red) mica calc, minor thin beds of f gr limy gray SS																										
ENTRADA FM TOP:	6,990	subsea: 1299 ft.	Permian Age: SS orange to pink to white med grained silica cement																										
DOCKUM FM TOP:	7,060	subsea: 1229 ft.	SS orange and dolomitic cemented silty, may become coarse arkosic ss																										
Glorieta ss member:	7,270	subsea: 1019 ft.	SHALE AND ARKOSIC SS (WASH) dominantly red shale, siltstone and red arkosic crs sediments																										
Yeso member:	7,390	subsea: 899 ft.																											
SANGRE DE CRISTO FM:	7,480	subsea: 809 ft.																											
MUD LOG/GEOLOGIC DRILLING NOTES																													
<p>NOTE: Injection zones expected to be encountered drilling to a depth of 7,500 feet</p> <p>Entrada fm SS: 6,990' - 7,060' with an estimated 40 feet net porous sand with this interval the primary zone for injection</p> <p>Glorieta SS: 7,270' - 7,390' with an estimated 50 feet net porous sand although no recent tests have been run across this interval in Raton basin</p> <p>NOTE: water flows of Tr. SS behind pipe, reduce wtr on Pierre drlg.</p> <p>NOTE: Drilling through rock prone to have vertical fractures, more than likely to be associated with gas shows</p> <p>NOTE: Pierre Shale is prone to swelling and it is suggested to minimize water across the shale for lengthy period</p> <p>NOTE: VPR A-7 WDW is used in direct correlation for VPR A-42 top prognosis</p> <p>NOTE: Glorieta SS is expected to be 70 feet below permitted depth</p>																													

VPR'A'-42 WDW: Completion and Injection Test Summary:

3/31/00: MIRU Completion Rig

4/2/00: Drill out cement from 4445' to top of 4 1/2" liner at 4470'

4/3/00: Tag cement in 4 1/2" liner at 6750'. Drill out cement and float collar to 6860'. Pressure test all casing to 1500 psi. OK.

4/7/00: Ran CBL from 6860' to 2450'.

4/9/00: RIH with 3 7/8" blade mill. Drill out cement and fill to 6930'.

4/19/00: Set cement retainer at 6720'. Pumped 25 sx. Cement below retainer to enable milling and reaming.

4/29-30/00: Drill and ream with motor and foam system to 6963'.

5/1/00: Set cement retainer at 6725'. Pumped 25 sx. Cement below retainer to enable motor and foam drilling.

5/2-19/00: Drilled and reamed to 7459'. Ran 2 7/8" slotted liner 6768' – 7459'.

5/21/00: Caught water sample from Entrada fmt. Found 29,000 ppm. Chlorides. Submitted analysis to NMOCD.

5/25/00: RIH with seal assembly on 4 1/2" 11.6# N-80, internally coated tubing. Circ. Packer fluid into annulus. Stung into PBR on TOL at 4470'. Pressure test Annulus to 1000 psi. OK.

5/26/00: RDMO completion rig. Nipple up well head for injection.

6/1/00: Injection test with disposal pump. Inject 5700 bbls. produced water in 24 hrs. at 180 psi.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Sonat Raton, L.L.C P.O. Box 190; Raton New Mexico 87740		² OGRID Number 180514
		³ API Number 30 - 007- 20142
⁴ Property Code 24648	⁵ Property Name Vermejo Park Ranch	⁶ Well No. VPR A-42 WDW

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	01	31N	19E		1619.4 ft.	FNL	2510.6 ft.	FWL	Colfax

⁸ Proposed 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

⁹ Proposed Pool 1

Entrada

¹⁰ Proposed Pool 2

Dakota

¹¹ Work Type Code N	¹² Well Type Code S	¹³ Cable/Rotary air / rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 8289'(GL)
¹⁶ Multiple no	¹⁷ Proposed Depth 7200'	¹⁸ Formation Entrada	¹⁹ Contractor Aztec	²⁰ Spud Date January 20, 2000

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	350'	200 sx.	Surface
12 1/4"	10 3/4"	40.5#	2600	500 sx.	Surface
9 7/8"	7 5/8"	26.4#	6440'	1100 sx.	Surface
6 3/4"	5 1/2"	15.5#	7200'	750 sx.	Surface

- 22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive one. Describe the blowout prevention program, if any. Use additional sheets if necessary.
- Drill 17 1/2" surface hole to 350'. Set 13 3/8" casing and cement to surf. with 200 sx. Midcon 2, at 13.5 ppg., 1.76 yld., 100% excess.
 - Drill 12 1/4" hole to just above Pierre Shale at approx. 2600'. Set 10 3/4" csg. Cement with 400 sx. Silica Lite at 12 ppg., 2.07 yld., followed by 100 sx. Class 'G' at 13.5 ppg., 1.76 yld. Cement bond log will be run if unable to circulate cement to surface.
 - Drill 9 7/8" hole to Dakota fnt. at approx. 6440'. Set 7 7/8" csg. Cement with 1100 sx. Midcon 2 (12.0 ppg., 2.49 yld., 100% excess). Cement bond log will be run if unable to circulate cement to surface.
 - Drill 6 3/4" hole through Entrada fnt. at approx. 7120'. Open hole logs to include induction resistivity, caliper, density, and gamma ray. Set 5 1/2" csg. Cement with 650 sx. Midcon 2 (12.0 ppg., 2.17 yld.) followed by 100sx. Class 'G' (14.6 ppg., 1.46 yld.)
 - Perforate Entrada fnt. attempt to catch native formation water sample. Conduct injectivity test. Sand frac if necessary to establish satisfactory injection rate.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: DR Lankford

Printed name: **Donald R. Lankford**

Title: **Senior Petroleum Engineer**

Date: **6/23/99**

Phone: (713)546-4621
(505)447-1379

OIL CONSERVATION DIVISION

Approved by:

Title:

DISTRICT SUPERVISOR

Approval Date:

1/21/00

Expiration Date:

1/21/01

Conditions of Approval:

Attached ☐

COLLECT AND SACK SAMPLES FOR
NEW MEXICO BUREAU OF MINES, SOCORRO
AT AT LEAST TEN FOOT INTERVALS

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1994

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 24648		4 Property Name VERMEJO PARK RANCH			4 Well Number VPR'A-42WDW
7 OGRID No. 180514		8 Operator Name SONAT RATION, L.L.C.			8 Elevation 8289.0

10 Surface Location

11 or lot no. F	Section 1	Township T 31 N	Range R 19 E	Lot Idn F	Feet from the 1619.4	North/South line NORTH	Feet from the 2510.6	East/West line WEST	County COLFAX
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11 Bottom Hole Location If Different From Surface

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

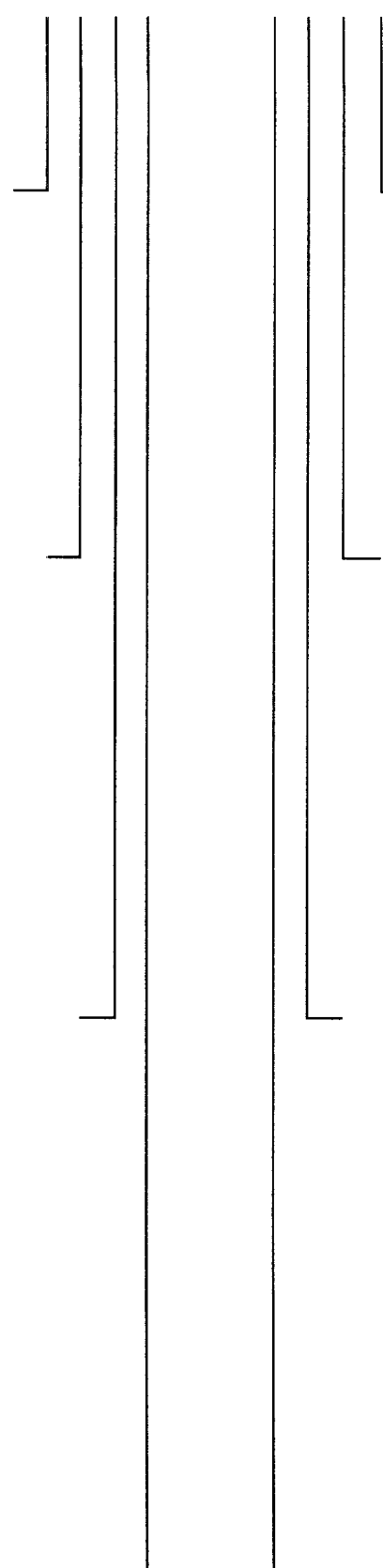
12 Dedicated Acres	12 Joint or Infill	12 Consolidation Code	12 Order No.
--------------------	--------------------	-----------------------	--------------

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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i> Signature <u>DR Lankford</u> Printed Name DONALD R. LANKFORD Title SENIOR PETROLEUM ENGINEER Date _____
				18 SURVEYOR CERTIFICATION <i>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</i> JANUARY 11, 2000 Date of Survey _____ Signature and Seal of Professional Surveyor <u>Just Shultz</u> Certificate Number 5103

VPK'A'-42 WDW

Casing and Cementing Program



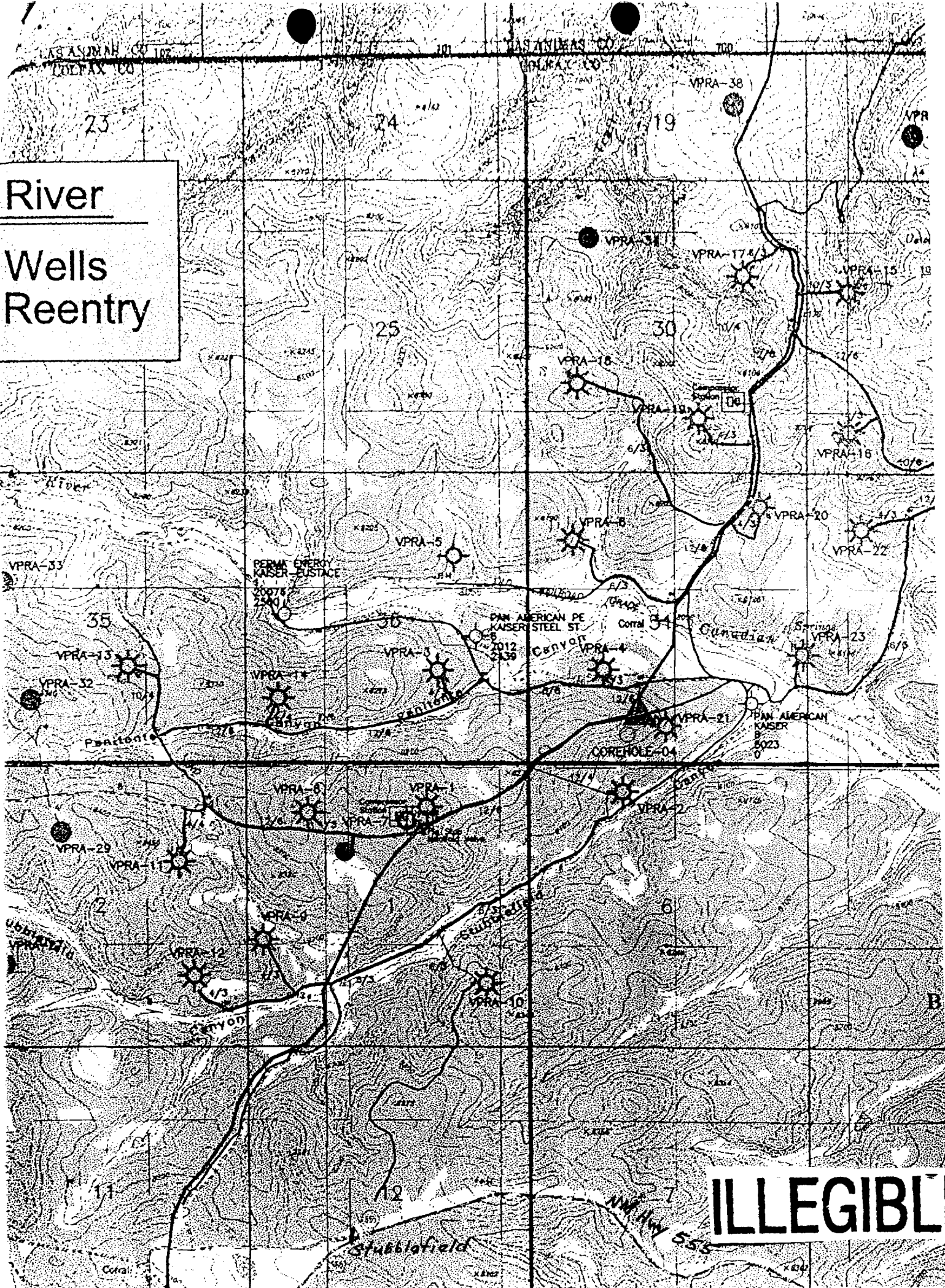
17 1/2" hole
13 3/8" 48# H-40 surface casing @ 350'
Cement with 200 sx. Midcon 2 @ 13.5 ppg. 1.76 yld.
(100% excess)

12 1/4" hole
10 3/4" 40.5# J-55 casing @ 2600' (above Pierre Shale)
Cement with 400 sx. Silica Lite @ 12.0 ppg. 2.07 yld.
(CBL will be run if unable to circ. cement to surface)

9 7/8" hole
7 5/8" 26.4# J-55 casing @ +/-6440' (into Dakota)
Cement with 1100 sx. MidCon 2 @ 12.0 ppg. 2.49 yld.
(CBL will be run if unable to circ. cement to surface)

6 3/4" hole
5 1/2" 15.5# J-55 casing @ +/- 7200' (below Entrada)
Cement with 650 sx. MidCon 2 @ 12.0 ppg. 2.49 yld.
followed with 100 sx. Class 'G' @ 14.6 ppg., 1.46 yld.
(CBL will be run)

River
Wells
Reentry



ILLEGIBLE



Champion
Technologies, Inc.

Committed To Improvement

Water Analysis Report

Customer: Sonat Raton

7/19/99

Address:

City:

State:

Zip:

Attention:

Date Sampled: 7/16/99

CC1:

Date Received: 7/19/99

CC2:

SALESMAN NAME: Larry Stanley

LEASE: Stubblefield Rd.

SAMPLE POINT: Wellhead

WELL: Hand Pump SW 1/4 Sec 1. 31N 19E

REMARKS: Tds - 193 (MG/L)

CHLORIDE (MG/L):	12
SULFATE (MG/L):	2
BICARBONATE (PPM):	134
CALCIUM (MG/L):	33
MAGNESIUM (MG/L):	11
IRON (PPM):	0
BARIUM (MG/L):	0
STRONTIUM (MG/L):	0
MEASURED pH:	6.7
TEMPERATURE:	100
DISSOLVED CO2 (PPM):	0
MOLE PERCENT CO2 IN GAS:	0.00
DISSOLVED H2S (PPM):	0.0
PRESSURE (PSIA):	25
SODIUM (PPM):	1
TDS (MG/L):	193
RESISTIVITY:	33.1606
IONIC STRENGTH:	0.00
CALCITE (CaCO3) SI: #Error	CALCITE PTB: N/A
GYPSUM (CaSO4) SI: N/A	GYPSUM PTB: N/A
BARITE (BaSO4) SI: N/A	BARITE PTB: N/A
CELESTITE (SrSO4) SI: N/A	CELESTITE PTB: N/A

SI calculations based on Tomson-Oddo

Resistivity calculated at STP

"ATTACHMENT C"

Well File

Champion
Technologies, Inc.

Committed To Improvement

Water Analysis Report

Customer: El Paso Energy

05/05/2000

Address: Box 190

City: Raton

State: NM

Zip: 87740-

Attention: Larry Casey

Date Sampled: 05/01/2000

CC1:

Date Received: 05/05/2000

CC2:

SALESMAN NAME: Larry Stanley

LEASE: VPC

SAMPLE POINT: Wellhead

WELL: 39 WDW

REMARKS: Entrada Formation and Glorieta Fmt.

SE 1/4 Sec 4, 35S, 44W, Las Animas County, Colorado (7.7 miles NE)

CHLORIDE (MG/L):	33936		
SULFATE (MG/L):	698		
BICARBONATE (PPM):	19		
CALCIUM (MG/L):	6360		
MAGNESIUM (MG/L):	364		
IRON (PPM):	1		
BARIUM (MG/L):	0		
STRONTIUM (MG/L):	0		
MEASURED pH:	5.7		
TEMPERATURE:	100		
DISSOLVED CO2 (PPM):	2		
MOLE PERCENT CO2 IN GAS:	0.00		
DISSOLVED H2S (PPM):	0.0		
PRESSURE (PSIA):	25		
SODIUM (PPM):	14365		
TDS (MG/L):	55742		
RESISTIVITY:	0.1148		
IONIC STRENGTH:	0.97		
CALCITE (CaCO3) SI:	-0.92	CALCITE PTB:	N/A
GYPSUM (CaSO4) SI:	-0.37	GYPSUM PTB:	N/A
BARITE (BaSO4) SI:	N/A	BARITE PTB:	N/A
CELESTITE (SrSO4) SI:	N/A	CELESTITE PTB:	N/A

SI calculations based on Tomson-Oddo

Resistivity calculated at STP.

"ATTACHMENT C"

"ATTACHMENT D"

El Paso Energy Raton, LLC GEOLOGIC WELL PROGNOSIS REPORT (Preliminary Report)				
WELL NAME:		VPR A - 7 WDW deepening		
FIELD	RATON BASIN CBM PROJECT		SEC.	1-31N-19E
FEET FNL:	<u>943</u>	FEET FEL:	<u>1,829</u>	POD
ELEV. GL.:	<u>8,272</u>	EST. SPUD:	<u>2/02</u>	EST TD:
PROPOSED COMMISSION FILING TD:		<u>7,800</u>		
Intermediate 10 3/4"				
REPORTED DRILLING DEPTH TOPS:				
Poison Canyon	<u>0</u>	subsea:	<u>8272</u>	ft.
RATON FM. TOP:	<u>350</u>	subsea:	<u>7922</u>	ft.
VERMEJO FM. TOP:	<u>2,229</u>	subsea:	<u>6043</u>	ft.
TRINIDAD FM. TOP:	<u>2,460</u>	subsea:	<u>5812</u>	ft.
Intermediate 7 5/8"				
REPORTED DRILLING DEPTH TOPS:		Estimated Drilled and cased Tops No Log coverage		
PIERRE FM. TOP:	<u>2,548</u>	subsea:	<u>5724</u>	ft.
Lower Pierre member:	<u>4,340</u>	subsea:	<u>3932</u>	ft.
NIOBRARA FM. TOP:	<u>5,100</u>	subsea:	<u>3172</u>	ft.
Smokey Hill Member:	<u>5,100</u>	subsea:	<u>3172</u>	ft.
Timpas Member:	<u>5,650</u>	subsea:	<u>2622</u>	ft.
Fort Hayes Member:	<u>5,900</u>	subsea:	<u>2372</u>	ft.
BENTON FM TOP:	<u>5,920</u>	subsea:	<u>2352</u>	ft.
Codell Member:	<u>5,920</u>	subsea:	<u>2352</u>	ft.
Carlile Sh. Member:	<u>5,980</u>	subsea:	<u>2292</u>	ft.
Greenhorn Ls. Member:	<u>6,090</u>	subsea:	<u>2182</u>	ft.
Graneros Sh. Member:	<u>6,150</u>	subsea:	<u>2122</u>	ft.
Intermediate 5 1/2"				
ESTIMATE OF TOPS:		TD 6,620' 9/9/99 (Tops below Purgatoire are projected)		
DAKOTA FM TOP:	<u>6,400</u>	subsea:	<u>1872</u>	ft.
Dakota SS A member:	<u>6,400</u>	subsea:	<u>1872</u>	ft.
Dakota SS B member:	<u>6,450</u>	subsea:	<u>1822</u>	ft.
Purgatoire SS member:	<u>6,490</u>	subsea:	<u>1782</u>	ft.
MORRISON FM TOP:	<u>6,570</u>	subsea:	<u>1702</u>	ft.
Wanakah member:	<u>6,900</u>	subsea:	<u>1372</u>	ft.
ENTRADA FM TOP:	<u>6,940</u>	subsea:	<u>1332</u>	ft.
DOCKUM FM TOP:	<u>7,040</u>	subsea:	<u>1232</u>	ft.
Glorieta ss member:	<u>7,320</u>	subsea:	<u>952</u>	ft.
Yeso member:	<u>7,420</u>	subsea:	<u>852</u>	ft.
SANGRE DE CRISTO FM:	<u>7,520</u>	subsea:	<u>752</u>	ft.
TD WELL FOR SUFFICIENT RAT HOLE TO COMPLETE IN GLORIETA (150' below Glorieta Top)				
Injection Zones (addition to Dakota/Purgatoire) Proposed for Completion in 850 ft. new hole				
Dakota/Purgatoire SS: 6,400' - 6,590' is presently active injection zone.				
Entrada fm SS: 6,940' - 7,040' with an estimated 40 feet net porous sand				
Glorieta SS: 7,320' - 7,420' with an estimated 50 feet net porous sand				

“Attachment E”

XIII. Proof of Notice

Surface Owner:

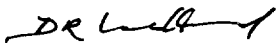
Vermejo Park, L.L.C.
PO Drawer E
Raton, NM 87740

Working/Offset & Royalty Owners:

El Paso Energy Corporation
Nine Greenway Plaza
Houston, TX 77046
Attn: Steve Hochstein

Vermejo Mineral Corporation
20 North Broadway, Suite 1500
Oklahoma City, OK 73102
Attn: David Frank

Copies of the Oil Conservation Division, Form C-108 have been sent to the above stated parties by Certified Mail on this 28 day of December, 2002.

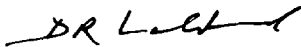


Donald R. Lankford, Petroleum Engineer
El Paso Energy Raton, L.L.C.
PO Box 190
Raton, NM 87740

"Notice of Application for Fluid Injection Well Permit"

El Paso Raton, L.L.C., Nine Greenway Plaza, Houston, Texas 77046 is seeking administrative approval from the New Mexico Oil Conservation Division to deepen their Vermejo Park Ranch "A", #07 water disposal well. The well is located in Section 01, T31N, R19E, Colfax County New Mexico. The proposed disposal intervals are the Dakota/Purgatoire Sandstone 6,400' – 6,590', Entrada Sandstone 6,940' – 7,040', and Glorieta Sandstone 7,320' – 7,420'. El Paso Raton, L.L.C. intends to inject a maximum of 18,000 bbls of produced formation water per day at a maximum injection pressure of 2,000 psi. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 S. St. Francis, Santa Fe, New Mexico 87505 within 15 days of this notice.

Thank you,



Donald R. Lankford, Petroleum Engineer
El Paso Raton, L.L.C.
PO Box 190
Raton, NM 87740
(505) 445-6724
(505) 445-6788 Fax

See Attachment

Legal No. _____
Published in the Raton Range: (Date)

15

Legal Notices

151 LEGALS

Notice of Application for Fluid Injection Well Permit

El Paso Raton, L.L.C., Nine Greenway Plaza, Houston, Texas 77046, is seeking administrative approval from the New Mexico Oil Conservation Division to complete their Vermejo Park Ranch "A", #07 as a water disposal well. The well is located in Section 01, T31N, R19E, Colfax County New Mexico. The proposed disposal intervals are the Dakota/Purgatoire Sandstone 6,400' - 6,590'; Entrada Sandstone 6,940' - 7,040'; and Glorieta Sandstone 7,320' - 7,420'. El Paso Raton, L.L.C. intends to inject a maximum of 18,000 bbls of produced formation water per day at a maximum injection pressure of 2,000 psi. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 S. St. Francis, Santa Fe, New Mexico 87505 within 15 days of this notice.

Thank you,

/s/ DR Lankford

Donald R. Lankford,
Petroleum Engineer

El Paso Raton, L.L.C.

PO Box 190

Raton, NM 87740

(505) 445-6721

(505) 445-6788 Fax

Legal No. 375501

Published in The Raton Range: December 31, 2001.

151 LEGALS

Notice of Application for Fluid Injection Well Permit

El Paso Raton, L.L.C., Nine Greenway Plaza, Houston, Texas, is seeking administrative approval from the New Mexico Oil Conservation Division to complete their Vermejo Park Ranch "E", #34 as a water disposal well. The well is located in Section 05, T31N, R19E, Colfax County New Mexico. The proposed disposal interval is the Dakota/Purgatoire Sandstone 6,250' - 6,430'; Entrada Sandstone 6,850' - 6,950'; and Glorieta Sandstone 7,220' - 7,340'. El Paso Raton, L.L.C. intends to inject a maximum of 18,000 bbls of produced formation water per day at a maximum injection pressure of 2,000 psi. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 S. St. Francis, Santa Fe, New Mexico 87505 within 15 days of this notice.

Thank you,

/s/ DR Lankford

Donald R. Lankford,
PE

El Paso Raton, L.L.C.

PO Box 190

Raton, NM 87740

(505) 445-6721

(505) 445-6788 Fax

Legal No. 375401

Published in The Raton Range: December 31, 2001.

151 LEGALS

COLFAX COUNTY

BOARD OF COMMISSIONERS

Regular Meeting

January 8, 2002

PUBLIC NOTICE IS HEREBY GIVEN that the Colfax County Board of Commissioners will meet in Regular Session on Tuesday, January 8, 2002 at 9:00 a.m., MST, in the Commission Chambers at the Colfax County Courthouse, Raton, NM for the following:

1. Elect Chairman & Vice Chairman
2. Approve Agenda
3. Approve Minutes and Expenditures

4. Recognize Visitors - Business Discussed later

5. Statutory Requirements

1. Resolution 2002-01 - Approve Open Meetings Resolution

2. Request Statement of Receipts & Expenses

3. Establish County Depository

4. Establish County Investment Policy

6. Reports - CCDC, Road, DWI & E-911

7. YES Coordinator Contract

8. NMNRD - Grant Agreement Approval

9. Set Liquor License Fees for 2002

10. Voting Machine Technician Contracts

11. Set Solid Waste Disposal Fees for 2002

12. Award of Fire Excise Tax Tankers

13. Audit - Fiscal

151 LEGALS

14. Ordinance 2002-01 - Noxious Weed Ordinance Introduction

15. Dispatch Agreement - City of Raton

16. Road Review Committee - CR - C-49 & C-50 - Recommendation

17. Resolution to be Approved

1. Resolution 2002-02 - Budget Increase Commissioners Professional Service

2. Resolution 2002-03 - Budget Increase - Sheriff - OBD Grant & Insurance Recovery

3. Resolution 2002-04 - Budget Adjustment - Fire Excise Tax Fund

4. Resolution 2002-05 - Budget Adjustment - Repeater - Lease - Line Item

5. Resolution 2002-06 - Budget Increase - Eagle Nest Fire Carry Over Difference in Encumbered & Balance

6. Resolution 2002-07 - Budget Increase - E.N. Ambulance Carry Over Difference in Encumbered & Balance

7. Resolution 2002-08 - Budget Transfer - Taos Pines Road District

18. Commissioners' Docket

19. Manager's Docket

20. Attorney's Docket

Done this 28th of December 2001.

Kathy M. Trujillo,
County Manager

Legal No. 375601

Published in The Raton Range: December 31, 2001.



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ENERGY CORPORATION

P.O. Box 190

Raton, New Mexico 87740

December 28, 2001

Mr. David Frank
Vermejo Minerals Corporation
20 North Broadway
Oklahoma City, OK 73102

Subject: Drilling Permit To Deepen VPR A 7 Water Disposal Well

Dear Mr. Frank:

According to the New Mexico Oil Conservation Division, Rules and Regulations, 701.B.2, we are required to furnish you with Applications for Permit to Drill for the water injection well as submitted to the New Mexico Oil Conservation Division.

Please be advised that we are currently submitting an APD for deepening the VPR A 7 Water Disposal Well. Find enclosed a copy of that submittal.

Sincerely,

Devon Energy Corporation

A handwritten signature in black ink, appearing to read "J.M. Duckworth".

J.M. Duckworth
Project Manager

devon
ENERGY CORPORATION
P.O. Box 190
Raton, New Mexico 87740

December 28, 2001

Vermejo Park Ranch
P. O. Drawer E
Raton, New Mexico 87740

Attn: Mr. David Vackar

Subject: Drilling Permit to Deepen VPR A 7 Water Disposal Well

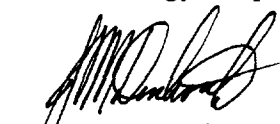
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Please be advised that we are currently submitting an APD for deepening the VPR A 7 Water Disposal Well. Find enclosed a copy of that submittal.

Sincerely,

Devon Energy Corporation

A handwritten signature in black ink, appearing to read 'J.M. Duckworth', is written over the printed name.

J.M. Duckworth
Project Manager

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised March 17, 1999

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address El Paso Energy Raton, L.L.C PO Box 190 Raton, New Mexico 87740		² OGRID Number 180514
		³ API Number 30-007-20116
³ Property Code 24648	⁵ Property Name Vermejo Park Ranch	Well No. VPR 'A' 07 WDW

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	01	31N	19E		943'	NORTH	1,829'	EAST	COLFAX

⁸ Proposed 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

⁹ Proposed Pool 1

Glorieta

¹⁰ Proposed Pool 2

Entrada

¹¹ Work Type Code N	¹² Well Type Code S	¹³ Cable/Rotary air / rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 8272'(GL)
¹⁶ Multiple No	¹⁷ Proposed Depth 7,470'	¹⁸ Formation Glorieta	¹⁹ Contractor	²⁰ Spud Date January 15, 2002

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
4 1/8"	3 1/2"	8.81#	6620' - 7,470'	20 sx.	Surface

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive one. Describe the blowout prevention program, if any. Use additional sheets if necessary.

1. MIRU CU. TOH w/ packer and tubing.
2. RU Halliburton. Squeeze Dakota perforations from 6400' - 6564' with cement.
3. Drill out cement. Circulate hole clean with water. RDMO CU.
4. MIRU drilling rig. Drill 4 1/8" hole from 6620' - 7470' with air.
5. RU casing crew and run 3 1/2" flush joint casing liner with liner hanger.
6. RU Halliburton and cement liner.
7. Drill out liner cement and circulated hole clean.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

DR Lankford

OIL CONSERVATION DIVISION

Approved by:

Printed name: **Donald R. Lankford**

Title:

Title: **Petroleum Engineer**

Approval Date:

Expiration Date:

Date: **12-21-01**

Phone: (505) 445-6721

Conditions of Approval:

Fax: (505) 445-6788

Attached ☐