# C108 APPLICATION FOR AUTHORIZATION TO INJECT

Prepared for:

State Of New Mexico Energy, Minerals And Natural Resources Department

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

Prepared by:



BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No.'s .....14332 & 14333 (Consolidated) Exhibit No. 4 Submitted by: <u>ENSTOR CRAMA RIDGE STORAGE</u> <u>AND TRANSPORTATION, LLC</u> Hearing Date: July 23, 2009 STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATIO	)N FOR	AUTHORIZ	ATION TO	<b>INJECT</b>

I.	PURPOSE:	Secondary Recovery s for administrative approval?	Pressure M Yes	laintenanceNo	_Disposal	<u>x</u>	_Storage
П.	OPERATOR: <u>ENST</u>	<u>`OR GRAMA RIDGE STORAGE A</u>	ND TRANSPOR	<u>TATION, LLC</u>			
	ADDRESS: <u>20329 S</u>	State Highway 249, Suite 400, Houst	<u>on, Texas 77070</u>				

CONTACT PARTY: Daryl Gee	PHONE: 1 (281) 379-7499

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. See Attachment III

IV.	Is this an expansion of an existing project?	<u>X</u>	_Yes	_No
	If yes, give the Division order number author	orizing the	e project: R-11611	

- 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. See Attachment V
- 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. See Attachment VI
- VII. Attach data on the proposed operation, including:
  - 1. Proposed average and maximum daily rate and volume of fluids to be injected; N/A
  - 2. Whether the system is open or closed; N/A
  - 3. Proposed average and maximum injection pressure; See Attachment VII
  - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, N/A
  - 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.). N/A
- \*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. See Attachment VIII
- IX. Describe the proposed stimulation program, if any. N/A
- \*X. Attach appropriate logging and test data on the well. Well Logs are on file with OCD.
- \*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. Only one water well falls within the 1-mile radius from the proposed injection well. The chemical analysis of this well is attached (See Attachment XI).
- 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:	TITLE:
SIGNATURE:	DATE:
E-MAIL ADDRESS:	

\* 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

Side 2

# III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.
- XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South

St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

Attachment III

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# Grama Ridge Federal, 8817 JV-P, #1

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III	1 API # (1) API # Location: Spudded: Completed:	30-025-30686 660' FNL, 1980' 10/14/1989 12/27/1989	FEL Sec. 9, T22S, F	<b>334E</b>					
	(2) Casing Record:	Size (in) 20" 13-3/8" 9-5/8" 7"	Weight (Ib/ft) Unknown 54.5 36.0 26.0	Grade Unknown K-55 K-55 N&L 80	Connection STC & BTC STC LTC	Depth Set (ft) Unknown 1,720 5,000' 11,700'	Hole Size (in) 17-1/2" 12-1/4" 8-3/4"	Cernenting Record 1,300 sacks 2,025 sacks 1,100 sacks	Top of Cement 403 sacks to Surface 414 sacks to Surface 6,550' Temp Log
	Liner Record:	4-1/2"	13.5	N-80	ГТС	11,468'-13,348' Lindsey Model R I	6-1/8" iner hanger w	280 sacks ith 6' tie back sleeve	Drill cement to 11,468' @ 11,468' *
	(3) Post work over Tubing:	Q.	18.0	P-110	SLX or equiv.	11,435			
	(4) Post work over Packer:	7" Baker F	A or equiv.		SLX or equiv.	11,435			
	*Lindsey Model R liner hanger is spe but there is no verification on daily dr	scified in Sun Petroleu rilling reports confirmiu	m's 1989 drilling plan ng actual model used.						
=	(1) Injection Formation:		Morrow Clastics						
	(2) Post work over Perforations:	12,844-48' 13,019-39'	Morrow "A" Morrow "C"						
	(3) Well originally drilled for produ-	iction of Natural G	ias						
	(4) Other perforated intervals	12,677-99'	Morrow Lime To be squeeze cen	nented with	50 sacks ceme	nt			
	(5) Next higher oil or gas zone: Next lower oil or gas zone:	12,677-99'	Morrow Lime None known						

Essex Energy Storage Services, Inc.

5/12/2009



4.

# Grama Ridge Federal, 8817 JV-P, #1

API # 30-025-30686 660' FNL, 1980' FEL Sec. 9, T22S, R34E

Following Conversion to Natural Gas Storage



Essex Energy Storage Services, Inc.

4-22-09

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Attachment VI

	UWI/API	Type	Status		ocation	-	Date	Activity	Depth		Record	of Comp	letion Fermenting	
-025-	30686-0000	GAS	Active	22S 34E		NW NE	Oct-89	Spud date	13,350	abj	DESE	ach'	r of manon	<del></del>
							Dec-89	Perforations - RFT measured Morrow "A" as depleted - No stimulation recorded in Morrow "C" - Morrow "C" at virgin pressure		13,019	13,039	Active	Morrow "C"	
							Jun-95	Added perforations - Isolated from Morrow "C" with OTIS perm packer @12,955'		12,677	12,686	Active	Morrow Lime	
							Jul-97	Added perforations to tailipipe in packer @12.955		12,955	12,955	Active	Morrow "C"	
							May-00	Added perforations/Co-mingled all zones		12,686 12,844	12,699 12,848	Active Active	Morrow Lime Morrow "A"	
-025	-30884-0000	GAS	₹1	22S 34	61 111	MN MN	May-90	Spud date	13,375					T
							Jul-90	Perforations		12,724 12,905	12,766 12,922	Active	Morrow Lime Morrow "A"	
				·····			Oct-92	Added perforations		12,995 13,051	12,999 13,056	Active	Morrow "B" Morrow "C"	
							Sep-95	Work over and isolation - Morrow producing water - Isolated Morrow with CIBP @ 12,860' - Began production of Morrow Line only		12,860	12,860	BP	above Morrow "A"	
							Nov-02	Well Shut-In						
						<u> </u>	Mar-06	Well TA - CIPG above Bone Spring		12,650	12,650			
					_	-				-				-

# Attachment VII

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 Proposed Average Injection Surface Pressure = 3850 psi Proposed Maximum Injection Surface Pressure = 5000 psi

## Attachment VIII

# Geological Summary

The Morrow Clastics in the Grama Ridge Storage Unit comprise four stratigraphic sequences, commonly referred to as Morrow 'A' through 'D'. Within the Unit sandstones can be developed in all zones, however porosity and permeability, and even the presence or absence of sand, vary widely between wells.

The sandstones in the Morrow at Grama Ridge were deposited during base-level rise into incised valleys cut into the marine Morrow shale during the previous sea level low-stand. Flooding of the valleys resulted in diporiented channel-fill sandstones, along with more strike-oriented deltaic and estuarine-marine sandstones. The sandstones are 10 to 30 feet thick, discontinuous, and less than one mile wide.

In the Grama Ridge Federal #1 (GR Fed #1) in NW NE Section 9-T22S-R34E, the gas storage interval includes the Morrow 'A' through the 'D' zones from 12,754 feet to 13,258 feet (see cross section in Attachment 8). Within the storage interval only the Morrow 'A' and Morrow 'C' are presently perforated (12,844-12,848; 13,019-13,039, respectively). The GR Fed #1 has no significant sand present in the Morrow 'B', and the Morrow 'D', while having about 14 feet of sand, appears to have only an average 3% porosity.

A summary of the target injection intervals in GR Fed #1 follows:

### Morrow 'A':

- Depth: 12821-12865
- Zone thickness: 44.3 feet
- Lithology: three sandstone units 10-18 feet thick separated by shales
- Gross 'A' Sandstone: 10.5 feet (using a normalized GR cutoff of 50 API)
- Net 'A' Sandstone: 5 feet (Gross SS with >=6% Porosity)

## Morrow 'C':

- Depth: 12975-13057
- Zone thickness: 82.6 feet
- Lithology: stacked sandstones with interbedded silts and shales; main sandstone is approximately 30 feet thick.
- Gross 'C' Sandstone: 36.75 feet (using a normalized GR cutoff of 50 API)
- Net 'C' Sandstone: 24.5 feet (Gross SS with >=6% Porosity)

The two (2) major groundwater aquifers found in the region of GR Fed #1 are the Ogallala Formation/Aquifer and the Capitan Aquifer. The Ogallala is the primary aquifer in the southern portions of Lea County. The Ogallala consists of sand, silt, clay, and gravel. It is approximately 250 feet thick, and thins toward the southern portion of the County where GR Fed #1 is located. The Ogallala Aquifer is used for municipal, domestic, livestock, irrigation, oil and gas production, and other commercial and industrial purposes. Groundwater in the Ogallala Aquifer generally is of good quality, usually suitable for potable purposes. It can occur under unconfined conditions at depths of 50 feet or less, but typical depths of water wells in the Ogallala are 100 to 500 feet below ground surface (bgs). Water supply well GR-1/WW-1 installed at the Grama Ridge compressor station in 2007 is assumed to be completed in the Ogallala. The boring was advanced to a total depth of 109 ft., and groundwater was encountered at a depth of 62 ft. Attached is a summary report of an analysis of groundwater sampled from the well after it was completed.

The Capitan Aquifer also is an important source of groundwater in the southern portion of Lea County. The Capitan consists of dolomite and limestone strata that are part of the Capitan Reef Complex. Water quality from the Capitan generally is very poor. However, it is used extensively for mining, oil and gas production, livestock watering, and some industrial and domestic purposes. The total depth of wells in the Capitan generally is 500 to 1,000 feet.

There are no known water sources underlying the Morrow Clastics at this location.





Install for Write AND TSCS     607-21       LABORATORY NO.     5-31-07       20333 State Hwy 249, Suite 400, Houston, TX 77070     SAMPLE RECEIVED     5-31-07       COMPANY Enstor     LEASE     Grama Plant       FIELO R POOL       SECTION	MIDLAND, TX. 79702 PHONE (432) 683-4521				709 W. 1 MIDLANO, T FAX (432)
Mr. Larry Khromer     LABORATORY NO.     OUT21       2033 State Hwy 249, Suite 400, Houston, TX 77070     SAMPLE RECEIVED     5-3-1207       COMPANY     Enstor     LEASE     Grama Plant       PIELD OR POOL     SURVEY     COUNTY     LEASE     MM       SOURCE OF SAMPLE AND DATE TAKEN:     NM     SOURCE OF SAMPLE AND DATE TAKEN:     NM       SOURCE OF SAMPLE AND DATE TAKEN:     NO. 1     LEASE     MM       SOURCE OF SAMPLE AND DATE TAKEN:     NO. 2     MAXIMUM contents for drinking water as recommended by the Texas Dept. of Health.       NO. 3     NO. 4     REMARKS:     NO. 1     NO. 2     NO. 3       Sectio Gravity at 60° F.     1.0020     NO. 4     NO. 4       REMARKS:     1.0020     NO. 4     NO. 5     NC       Statubonis at no.0,     195     Statubonis at no.0,     195       Statubonis at no.0,     195     Statubonis at ano,     100       Understatunistic as CoO,     168     Casuma sciele     Statubonis at ano,       Statubonis at no.0,     30     300     Statubonis at ano,     Statubonis at ano,       Statubonis at no.0,     12     Statubonis at ano,     Statubonis at ano,     Statubonis at ano,       Statubonis at no.0,     303     300     Statubonis at ano,     Statubonis at ano,		RESULT OF WATER	RANALYSES		607-21
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Undersaturation a succi, Total Hardness as CaCO, Calcium as Ca Magnetium as Mg Sodium and/or Potassium Sodium and/or Potassium Suttate as SO, Chloride as Cl Lino as Fe Solida es mgl Volume Filtered, mt Solida es mgl Volume Filtered, mt Solida es mgl Volume Filtered, mt Solida es mgl Volume Filtered, mt Solida es mgl Solida es mgl S	Supersaturation as CaCO,				
Idea       100         Catchum as Ca       48         Magnesium as Mg       12         Sodium and/or Potassium       34         Suttate as S0,       30         Suttate as S0,       30         Choide as Ci       36         iron as Fe       0.15         Diarder Potassium       36         Color as Fi	Undersaturation as CaCO,	160			
Lation as Ca       40         Magnesium as Mq       12         Sodium andler Potassium       34         Suitae as S0,       30         Suitae as S0,       30         Chordice as Ci       36         ion as Fe       0.15         Disolitity, Electric       1         Color as Pi       1         Total Solite, Calculated       355         Tamparature *F.       1         Carbon Dioxide, Calculated       0.0         Dissolved Oxygen,       1         Hydrogen Zwittle       0.0         Resistivity, ohmalm at 77* F.       24.20         Suspended Oil       1         Filtrable Solice as mg/l       1         Volume Filtered, mi       10.0         Results Reported As Milligrams Per Later         Additionel Determinations And Remetsa       Based on the determinations performed above, this water         Shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed	Colores as Calor	100	••••		
Imagination is signed       12         Sodium and/or Polassium       34         Sodium and/or Polassium       34         Sodium and/or Polassium       34         Suitate as So,       30         Chloride as Cl       36         Iron as Fe       0.15         Barum as Ba		40		· ····	-+
Section and/or Poisson     34       Suitate as So,     30       Chorice as Ci     36       ion as Fe     0.15       Barum as Ba	Magnesium as Mg	12			
Suita & S.O.     30     300       Chloride as Ci     36     300       Iron as Fe     0.15     0.30       Barlum as Ba     1     1       Turbidity, Electric     1     1       Color as Pi     1     1       Total Solids, Calculated     355     1,000       Temperature *F.     1     1       Carbon Dioxide, Calculated     0.0     1       Dissolved Oxygen,     1     1       Hydrogen Suifide     0.0     1       Resistivity, character     24.20     1       Sugended Oil     10.0     10.0       Nitrate, as N     4.0     10.0       Results Reported As Milligrams Per Liter     10.0       Additional Determinations And Remarks     Based on the determinations performed above, this water       shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed	Sodium and/or Polassium		200		
Control of a string as Ba       30       300         Barlum as Ba       0.15       0.30         Turbidity, Electric       100       100         Color as P1       100       100         Total Solide, Calculated       355       1,000         Temperature *F.       100       100         Carbon Dioxide, Calculated       0.0       100         Dissolved Oxygen,       100       100         Hydrogen Suifide       0.0       100         Resistivity, ohnsim at 77* F.       24.20       Suspended Oil         Filtrable Solides as mg/l       10.0       10.0         Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter       24.20       24.20         Subsended Oil       10.0       10.0         Pittrable Solide se mg/l       10.0       10.0         Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter       200       200         Additional Determinations And Remerks       Based on the determinations performed above, this water         shows sait levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed			300		
Intervent     0.13     0.30       Barlum as Ba     0.13     0.30       Turbidity, Electric     0.13     0.30       Color as Pi     0.13     0.30       Total Solids, Calculated     355     1,000       Temperature *F.     0.00     0.00       Carbon Dioxide, Calculated     0.00     0.00       Dissolved Cargon,     0.00     0.00       Hydrogen Sulfide     0.00     0.00       Resistivity, ohmaim at 77* F.     24.20     0.00       Suspended Oll     0.00     0.00       Filtrable Solids as mg/l     0.00     0.00       Volume Filtered, mi     0.00     0.00       Nittrate, as N     4.00     10.00       Results Reported As Milligrame Per Liter     Additional Determinations And Remerks     Based on the determinations performed above, this water       shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed		0.15	0.20		
Introduction       Image: Construction of the submitted sample and therefore this water should not be consumed         Total Solids, Calculated       355       1,000         Total Solids, Calculated       355       1,000         Temperature *F.       Image: Calculated       Image: Calculated         Carbon Dioxide, Calculated       Image: Calculated       Image: Calculated         Dissolved Oxygen,       Image: Calculated       Image: Calculated         Hydrogen Suifide       0.0       Image: Calculated         Resistivity, onnaim at 77* F.       24.20       Image: Calculated         Suspended Oli       Image: Calculated on the c	Barium as Re	0.15	0.50		
Color as Pl       355       1,000         Total Solido, Calculated       355       1,000         Temperature "F.       1000       1000         Carbon Dioxido, Calculated       0.0       1000         Mydrogen Sullide       0.0       1000         Resistivity, ohmalm at 77" F.       24.20       24.20         Suspended Oli       10.0       10.0         Filtrable Solids as mgil       10.0       10.0         Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter         Additional Determinations And Remerks       Based on the determinations performed above, this water         shows salt levels that comply with State Health Department standards for drinking water. However, colliform bacteria was present in the submitted sample and therefore this water should not be consumed	Turbidity Flactric		·   ·	· · ·	· · · · · · · · · · · · · · · · · · ·
Total Solida, Calculated     355     1,000       Temparature "F.	Color as Pt				
Temperature FF.     1000       Carbon Dioxide, Carcuiated     1000       Dissolved Oxygen,     0.0       Hydrogen Suifide     0.0       Resistivity, ohms/m at 77* F.     24.20       Suspended Oll     1000       Filtrable Solids as mg/l     1000       Volume Filtered, mt     10.0	Total Solida, Calculated	355	1,000		
Carbon Dioxide, Calculated	Tempsrature "F.		1,000		
Dissolved Oxygen,       0.0         Hydrogen Suifide       0.0         Resistivity, ohmaim at 77° F.       24.20         Suspended Oli	Carbon Dioxide, Calculated				
Hydrogen Suifide       0.0         Resistivity, ohms/m et 77* F.       24.20         Suspended Oli	Dissolved Oxygen.			• •• ••• ••	
Resistivity, onmain at 77* F.       24.20         Suspended OII	Hydrogen Sulfide	0.0			
Suspended OII       Filtrable Solids as movil         Filtrable Solids as movil       Volume Filtered, mt         Volume Filtered, mt       Image: Solids as movies         Nitrate, as N       4.0         Results Reported As Milligrams Per Liter         Additional Determinations And Remarks       Based on the determinations performed above, this water         shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed         Image: Solid State	Resistivity, ohma/m at 77* F.	24.20	-		1
Filtrable Solids as mg/l       Volume Filtered, mt         Volume Filtered, mt       10.0         Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter         Additional Determinations And Remarka         Based on the determinations performed above, this water         Shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed         X	Suspended Oil				
Volume Filtered, mi	Filtrable Solids as mg/l			•	
Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter         Additional Determinations And Remerks       Based on the determinations performed above, this water         shows salt levels that comply with State Health Department standards for drinking water. However, colliform bacteria was present in the submitted sample and therefore this water should not be consumed	Volume Filtered, mt				
Nitrate, as N       4.0       10.0         Results Reported As Milligrams Per Liter         Additional Determinations And Remarks       Based on the determinations performed above, this water         shows salt levels that comply with State Health Department standards for drinking water. However, colliform bacteria was present in the submitted sample and therefore this water should not be consumed         Image: State of the submitted sample and therefore the submitted sample and the submitted sample and therefore the submitted sample and therefore the submitted sample and the submitted sampl		······			
Additional Determinations And Remarks       Based on the determinations performed above, this water         Shows salt levels that comply with State Health Department standards for drinking water. However,       Coliform bacteria was present in the submitted sample and therefore this water should not be consumed	Nitrate as N		10.0		
Additional Determinations And Remarks Based on the determinations performed above, this water shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed	1111111111, as IN	Results Reported As Milli	IU.U grams Per Liter		
shows salt levels that comply with State Health Department standards for drinking water. However, coliform bacteria was present in the submitted sample and therefore this water should not be consumed	Additional Determinations And Remarks	Bacad on the date	erminations norforma	d above this.	unte <del>r</del>
colliform bacteria was present in the submitted sample and therefore this water should not be consumed	shows salt levels that comply with t	State Health Denastment	standarde for drinkin	a water Univ	ALLI
	coliform bacteria was present in the	submitted sample and th	arefore this water ch	ould not be co	neumed
	Provident of a start of the product of the	satisfied satisfies and th	A STOLE HILD PROLED SH	and not be ob	International
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13.



Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 Bacterial & Chemical Analysis

Го:	Mr. Larry Khromer	Laboratory No.	B607-31
	20333 State Hwy 249, Suite 400	Sample received	5-31-07
	Houston, TX 77070	Sample reported	6-4-07

Company:	Enstor
County: Field:	Lea, NM
Lease:	Grama Plant
Subject:	To determine the presence or absence of coliform bacteria.
<u>Method</u> :	USEPA Equivalent Presence/Absence Method 8364 100 ml of sample is combined with premeasured and packaged media broth, incubated 48 hours at 35°C, and examined for yellow color, which indicates the presence of coliforms, or a red color, indicating a negative test.

Source of sample and date taken: Drinking water - taken 5-31-07.

Found (Present)

Not Found (Absent)

<u>Remarks</u>: These results show coliform bacteria to be present in the submitted water sample and therefore this water would not be acceptable for human consumption.

Greg Ogden, B.S.

(432) 683-4521 \* 709 W. Indiana, Midland, Texas 79701 \* (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702 Visit our Website @: www.martinwaterlabs.com