

Lynx Petroleum Consultants, Inc.

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NOV 02 2007
OCD-ARTESIA

30-015-35194

November 1, 2007

Bryan Arrant
NMOCD
1301 W. Grand Ave.
Artesia, NM 88210

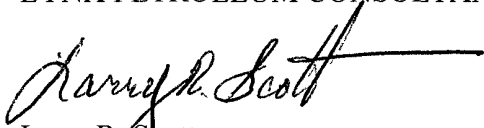
Re: Eddy BD State No. 2

Dear Mr. Arrant:

Please find enclosed the water analysis reports on the reef section and a full suite of open-hole logs for the referenced well. We apologize for the delay in submitting this information.

Sincerely,

LYNX PETROLEUM CONSULTANTS, INC.



Larry R. Scott

LRS/ad

enc

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	Base Line Start @ 1583 ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

- | | | |
|-----------------------------------|--------|------------------------------------|
| 1. pH | 7 | |
| 2. Specific Gravity @ 60/60 F. | 1.205 | |
| 3. CaCO3 Saturation Index @ 80 F. | +1.194 | 'Calcium Carbonate Scale Possible' |
| @ 140 F. | +2.334 | 'Calcium Carbonate Scale Possible' |

Dissolved Gasses

- | | | |
|---------------------|----------------|-----|
| 4. Hydrogen Sulfide | 0 | PPM |
| 5. Carbon Dioxide | 80 | PPM |
| 6. Dissolved Oxygen | Not Determined | |

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	900	/	20.1	=	44.78
8. Magnesium (Mg++)	2,066	/	12.2	=	169.30
9. Sodium (Na+) Calculated	122,773	/	23.0	=	5,337.94
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

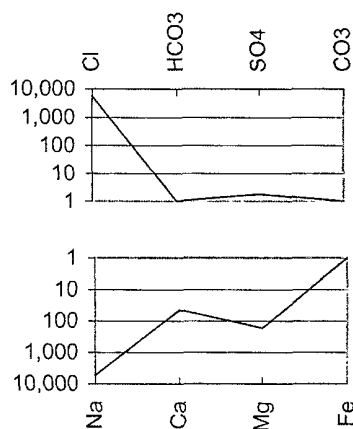
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	59	/	61.1	=	0.96
14. Sulfate (SO4=)	86	/	48.8	=	1.76
15. Chloride (Cl-)	197,000	/	35.5	=	5,549.30

Other

- | | | | | | |
|------------------------------------|---------|------------|------|-------------|------|
| 16. Soluble Iron (Fe) | 0 | / | 18.2 | = | 0.00 |
| 17. Total Dissolved Solids | 322,883 | | | | |
| 18. Total Hardness As CaCO3 | 10,750 | | | | |
| Calcium Sulfate Solubility @ 90 F. | 4,855 | | | | |
| 20. Resistivity (Measured) | 0.027 | Ohm/Meters | @ 84 | Degrees (F) | |

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	0.96	=	78
CaSO4	68.07	X	1.76	=	120
CaCl2	55.50	X	42.06	=	2,334
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	169.30	=	8,062
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	5,337.94	=	312,056

CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	1700 ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	8.2	
2. Specific Gravity @ 60/60 F.	1.015	
3. CaCO ₃ Saturation Index @ 80 F.	+0.786	'Calcium Carbonate Scale Possible'
@ 140 F.	+1.656	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,400	/	20.1	=	69.65
8. Magnesium (Mg++)	61	/	12.2	=	4.98
9. Sodium (Na+) Calculated	4,221	/	23.0	=	183.54
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

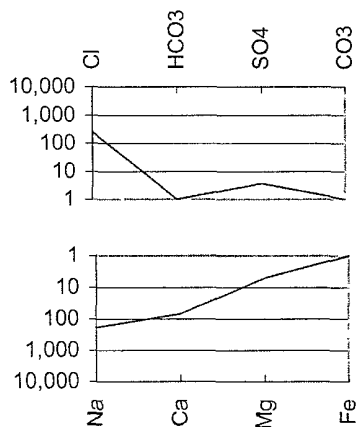
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	59	/	61.1	=	0.96
14. Sulfate (SO ₄ =)	180	/	48.8	=	3.69
15. Chloride (Cl-)	9,000	/	35.5	=	253.52

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	14,921				
18. Total Hardness As CaCO ₃	3,750				
Calcium Sulfate Solubility @ 90 F.	1,803				
20. Resistivity (Measured)	0.310	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	0.96	=	78
CaSO ₄	68.07	X	3.69	=	251
CaCl ₂	55.50	X	65.00	=	3,608
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	4.98	=	237
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	183.54	=	10,730

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	1800	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	6.8	
2. Specific Gravity @ 60/60 F.	1.020	
3. CaCO ₃ Saturation Index @ 80 F.	-0.440	
@ 140 F.	+0.430	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

Cations	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,600	/	20.1	=	79.60
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	4,137	/	23.0	=	179.86
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

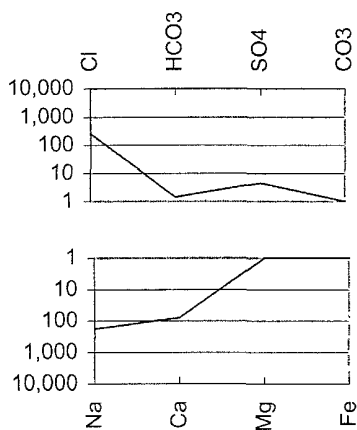
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	88	/	61.1	=	1.44
14. Sulfate (SO4=)	220	/	48.8	=	4.51
15. Chloride (Cl-)	9,000	/	35.5	=	253.52

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	15,045				
18. Total Hardness As CaCO3	4,000				
Calcium Sulfate Solubility @ 90 F.	1,873				
20. Resistivity (Measured)	0.310	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	1.44	=	117
CaSO ₄	68.07	X	4.51	=	307
CaCl ₂	55.50	X	73.66	=	4,088
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	179.86	=	10,515

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	1900 ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	6.3
2. Specific Gravity @ 60/60 F.	1.020
3. CaCO3 Saturation Index @ 80 F.	-1.213
@ 140 F.	-0.363

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,600	/	20.1	=	79.60
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	5,429	/	23.0	=	236.05
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

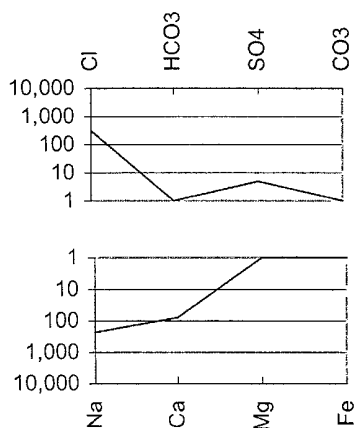
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	54	/	61.1	=	0.88
14. Sulfate (SO4=)	240	/	48.8	=	4.92
15. Chloride (Cl-)	11,000	/	35.5	=	309.86

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	18,323				
18. Total Hardness As CaCO3	4,000				
Calcium Sulfate Solubility @ 90 F.	2,063				
20. Resistivity (Measured)	0.300	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	0.88	=	71
CaSO4	68.07	X	4.92	=	335
CaCl2	55.50	X	73.81	=	4,096
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	0.00	=	0
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	236.05	=	13,800

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	2000 ft.	Capitan Rep. : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	7	
2. Specific Gravity @ 60/60 F.	1.050	
3. CaCO ₃ Saturation Index @ 80 F.	-0.009	
	@ 140 F.	+0.901 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,400	/	20.1	=	69.65
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	8,969	/	23.0	=	389.96
10 Barium (Ba++)	Not Determined	/	68.7	=	0.00

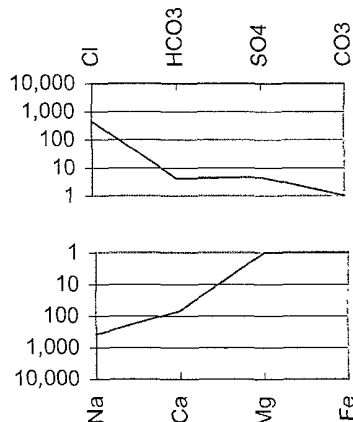
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	259	/	61.1	=	4.23
14 Sulfate (SO ₄ =)	228	/	48.8	=	4.67
15. Chloride (Cl-)	16,000	/	35.5	=	450.70

Other

16 Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	26,856				
18. Total Hardness As CaCO ₃	3,500				
Calcium Sulfate Solubility @ 90 F.	2,575				
20. Resistivity (Measured)	0.220	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	4.23	=	343
CaSO ₄	68.07	X	4.67	=	318
CaCl ₂	55.50	X	60.75	=	3,371
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	389.96	=	22,797

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2100 ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F.	1.025	
3. CaCO3 Saturation Index @ 80 F.	+3.332	'Calcium Carbonate Scale Possible'
@ 140 F.	+4.232	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,300	/	20.1	=	64.68
8. Magnesium (Mg++)	182	/	12.2	=	14.94
9. Sodium (Na+) Calculated	7,524	/	23.0	=	327.13
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

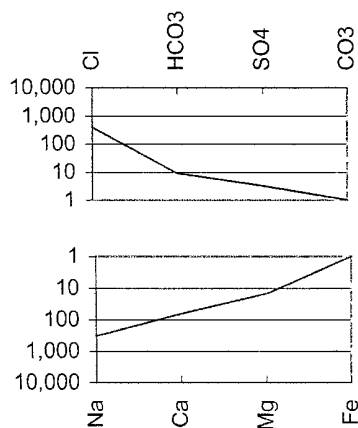
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	556	/	61.1	=	9.11
14. Sulfate (SO4=)	160	/	48.8	=	3.28
15. Chloride (Cl-)	14,000	/	35.5	=	394.37

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	23,723				
18. Total Hardness As CaCO3	4,000				
Calcium Sulfate Solubility @ 90 F.	2,469				
20. Resistivity (Measured)	0.280	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	9.11	=	738
CaSO4	68.07	X	3.28	=	223
CaCl2	55.50	X	52.29	=	2,902
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	14.94	=	711
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	327.13	=	19,124

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2200 Ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F	1.025	
3. CaCO3 Saturation Index @ 80 F.	+3.210	'Calcium Carbonate Scale Possible'
@ 140 F.	+4.110	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt	=	MEQ/L
7. Calcium (Ca++)	1,400	/	20.1	=	69.65
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	7,945	/	23.0	=	345.45
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

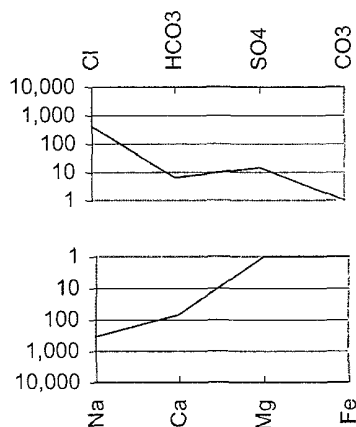
Anions

		/		=	
11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	390	/	61.1	=	6.39
14. Sulfate (SO4=)	700	/	48.8	=	14.34
15. Chloride (Cl-)	14,000	/	35.5	=	394.37

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	24,436				
18. Total Hardness As CaCO3	3,500				
Calcium Sulfate Solubility @ 90 F.	2,764				
20. Resistivity (Measured)	0.280	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	6.39	=	518
CaSO4	68.07	X	14.34	=	976
CaCl2	55.50	X	48.92	=	2,715
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	0.00	=	0
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	345.45	=	20,195

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2300 Ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F.	1.025	
3. CaCO3 Saturation Index @ 80 F.	+3.206	'Calcium Carbonate Scale Possible'
@ 140 F.	+4.116	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

Cations	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,600	/	20.1	=	79.60
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	7,662	/	23.0	=	333.13
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

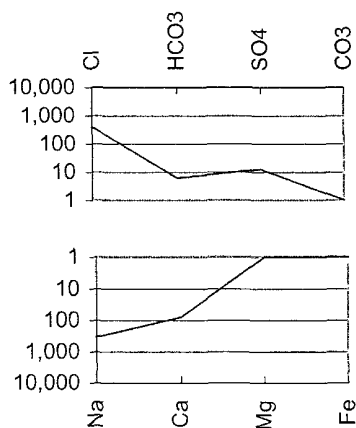
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	371	/	61.1	=	6.07
14. Sulfate (SO4=)	600	/	48.8	=	12.30
15. Chloride (Cl-)	14,000	/	35.5	=	394.37

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	24,233				
18. Total Hardness As CaCO3	4,000				
Calcium Sulfate Solubility @ 90 F.	2,534				
20. Resistivity (Measured)	0.280	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	6.07	=	492
CaSO ₄	68.07	X	12.30	=	837
CaCl ₂	55.50	X	61.24	=	3,399
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	333.13	=	19,475

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	2400 Ft.	Capitan Rep. : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F.	1.025	
3. CaCO ₃ Saturation Index @ 80 F.	+2.950	'Calcium Carbonate Scale Possible'
@ 140 F.	+3.860	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

Cations	mg/L	/	Eq Wt.	=	MEQ/L
7. Calcium (Ca++)	1,500	/	20.1	=	74.63
8. Magnesium (Mg++)	122	/	12.2	=	9.96
9. Sodium (Na+) Calculated	7,538	/	23.0	=	327.72
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

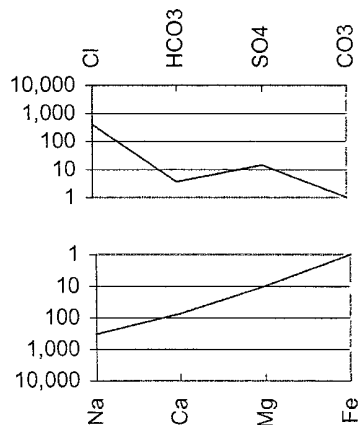
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	220	/	61.1	=	3.59
14. Sulfate (SO4=)	700	/	48.8	=	14.34
15. Chloride (Cl-)	14,000	/	35.5	=	394.37

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	24,079				
18. Total Hardness As CaCO3	4,250				
Calcium Sulfate Solubility @ 90 F.	2,665				
20. Resistivity (Measured)	0.280	· Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	3.59	=	291
CaSO ₄	68.07	X	14.34	=	976
CaCl ₂	55.50	X	56.69	=	3,146
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	9.96	=	474
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	327.72	=	19,158

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2500 Ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F.	1.015	
3. CaCO ₃ Saturation Index @ 80 F.	+3.893	'Calcium Carbonate Scale Possible'
@ 140 F.	+4.753	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,600	/	20.1	=	79.60
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	1,772	/	23.0	=	77.03
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

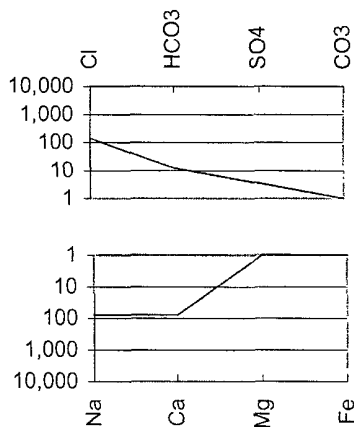
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	752	/	61.1	=	12.30
14. Sulfate (SO ₄ =)	170	/	48.8	=	3.48
15. Chloride (Cl-)	5,000	/	35.5	=	140.85

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	9,293				
18. Total Hardness As CaCO ₃	4,000				
Calcium Sulfate Solubility @ 90 F.	1,220				
20. Resistivity (Measured)	0.300	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	12.30	=	997
CaSO ₄	68.07	X	3.48	=	237
CaCl ₂	55.50	X	63.82	=	3,542
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	77.03	=	4,503

CAPITAN CHEMICAL
WATER ANALYSIS REPORT

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	2600 Ft.	Capitan Rep. : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	8.4	
2. Specific Gravity @ 60/60 F.	1.025	
3. CaCO ₃ Saturation Index @ 80 F.	+1.720	'Calcium Carbonate Scale Possible'
@ 140 F.	+2.570	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	900	/	20.1	=	44.78
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9. Sodium (Na+) Calculated	2,863	/	23.0	=	124.49
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

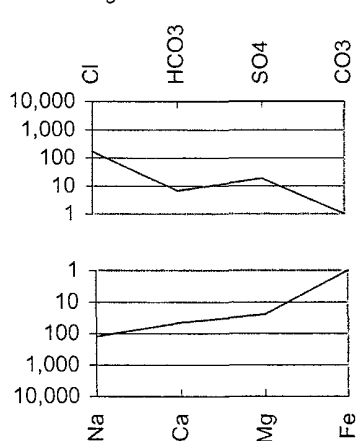
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	410	/	61.1	=	6.71
14. Sulfate (SO ₄ =)	900	/	48.8	=	18.44
15. Chloride (Cl-)	6,000	/	35.5	=	169.01

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	11,377				
18. Total Hardness As CaCO ₃	3,500				
Calcium Sulfate Solubility @ 90 F.	2,336				
20. Resistivity (Measured)	0.340	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	6.71	=	544
CaSO ₄	68.07	X	18.44	=	1,255
CaCl ₂	55.50	X	19.62	=	1,089
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	24.90	=	1,186
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	124.49	=	7,278

**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2700 Ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	10	
2. Specific Gravity @ 60/60 F.	1.009	
3. CaCO ₃ Saturation Index @ 80 F.	+3.747	'Calcium Carbonate Scale Possible'
@ 140 F.	+4.447	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7 Calcium (Ca++)	900	/	20.1	=	44.78
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9 Sodium (Na+) Calculated	-717	/	23.0	=	-31.18
10 Barium (Ba++)	Not Determined	/	68.7	=	0.00

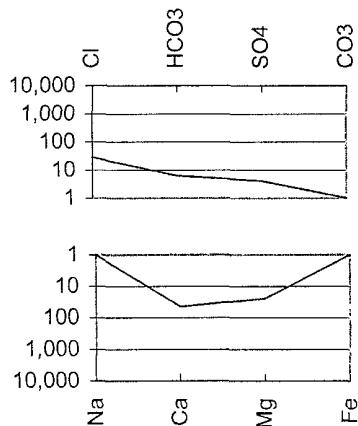
Anions

11 Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	381	/	61.1	=	6.23
14. Sulfate (SO ₄ =)	200	/	48.8	=	4.10
15. Chloride (Cl-)	1,000	/	35.5	=	28.17

Other

16 Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	2,067				
18 Total Hardness As CaCO ₃	3,500				
Calcium Sulfate Solubility @ 90 F.	1,080				
20. Resistivity (Measured)	1.400	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	6.23	=	505
CaSO ₄	68.07	X	4.10	=	279
CaCl ₂	55.50	X	34.45	=	1,912
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	24.90	=	1,186
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-31.18	=	-1,823

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	2800 Ft.	Capitan Rep : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	6.5	
2. Specific Gravity @ 60/60 F.	1.008	
3. CaCO ₃ Saturation Index @ 80 F.	-0.168	
	@ 140 F.	+0.532 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	20	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	600	/	20.1	=	29.85
8. Magnesium (Mg++)	243	/	12.2	=	19.92
9. Sodium (Na+) Calculated	-273	/	23.0	=	-11.86
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

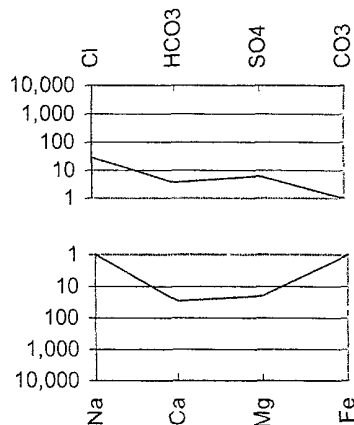
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	220	/	61.1	=	3.59
14. Sulfate (SO ₄ =)	300	/	48.8	=	6.15
15. Chloride (Cl-)	1,000	/	35.5	=	28.17

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	2,090				
18. Total Hardness As CaCO ₃	2,500				
Calcium Sulfate Solubility @ 90 F.	1,388				
20. Resistivity (Measured)	1,800	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	3.59	=	291
CaSO ₄	68.07	X	6.15	=	418
CaCl ₂	55.50	X	20.11	=	1,116
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	19.92	=	948
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-11.86	=	-693

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	2900 Ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	6.5	
2. Specific Gravity @ 60/60 F.	1.008	
3. CaCO3 Saturation Index @ 80 F.	-0.176	
	@ 140 F.	+0.524 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	20	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	500	/	20.1	=	24.88
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9. Sodium (Na+) Calculated	-400	/	23.0	=	-17.37
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

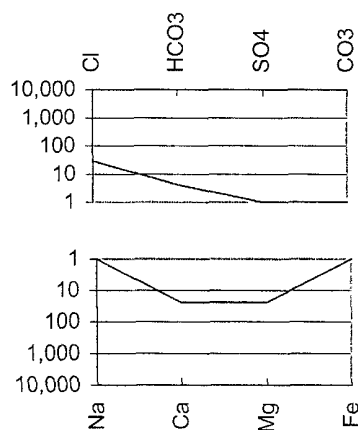
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	259	/	61.1	=	4.23
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	1,000	/	35.5	=	28.17

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	1,663				
18. Total Hardness As CaCO3	2,500				
Calcium Sulfate Solubility @ 90 F.	1,361				
20. Resistivity (Measured)	1 870	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	"	mg/L
Ca(HCO3)2	81.04	X	4.23	"	343
CaSO4	68.07	X	0.00	"	0
CaCl2	55.50	X	20.64	"	1,146
Mg(HCO3)2	73.17	X	0.00	"	0
MgSO4	60.19	X	0.00	"	0
MgCl2	47.62	X	24.90	"	1,186
NaHCO3	84.00	X	0.00	"	0
NaSO4	71.03	X	0.00	"	0
NaCl	58.46	X	-17.37	"	-1,016

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	3000 ft.	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	7.3	
2. Specific Gravity @ 60/60 F.	1.006	
3. CaCO ₃ Saturation Index @ 80 F.	+0.905	'Calcium Carbonate Scale Possible'
@ 140 F.	+1.605	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,100	/	20.1	=	54.73
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	2,065	/	23.0	=	89.79
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

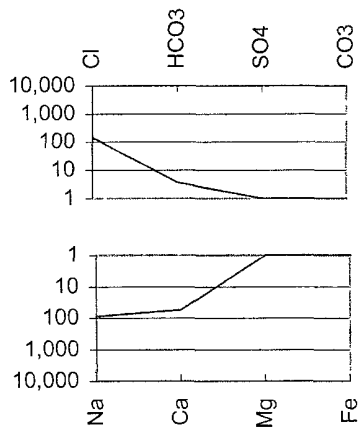
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	224	/	61.1	=	3.67
14. Sulfate (SO ₄ =)	0	/	48.8	=	0.00
15. Chloride (Cl-)	5,000	/	35.5	=	140.85

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	8,390				
18. Total Hardness As CaCO ₃	2,750				
Calcium Sulfate Solubility @ 90 F.	1,496				
20. Resistivity (Measured)	1 730	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	3.67	=	298
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	51.05	=	2,833
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	89.79	=	5,249

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

Lease Name :	Lynx Petroleum
Well Number :	3100
Location :	Eddy BD #2
	Eddy County , New Mexico

Date Sampled : 08/27/07
Capitan Rep. : Joe Hughes
Company Rep. : Larry Scott

ANALYSIS

1. pH	9	
2. Specific Gravity @ 60/60 F.	1.010	
3 CaCO ₃ Saturation Index @ 80 F.	+2.721	'Calcium Carbonate Scale Possible'
@ 140 F.	+3.421	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

Cations	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	1,100	/	20.1	=	54.73
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9. Sodium (Na+) Calculated	458	/	23.0	=	19.92
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

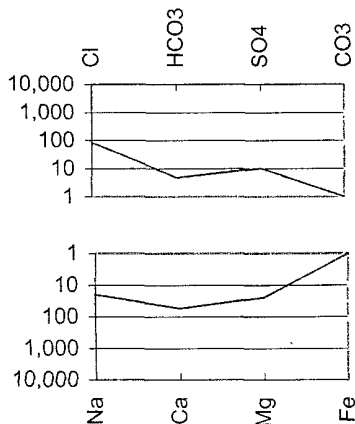
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	293	/	61.1	=	4.79
14. Sulfate (SO4=)	500	/	48.8	=	10.25
15 Chloride (Cl-)	3,000	/	35.5	=	84.51

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	5,655				
18. Total Hardness As CaCO3	4,000				
Calcium Sulfate Solubility @ 90 F.	1,371				
20. Resistivity (Measured)	1.650	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	4.79	=	388
CaSO ₄	68.07	X	10.25	=	697
CaCl ₂	55.50	X	39.69	=	2,203
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	24.90	=	1,186
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	19.92	=	1,165

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	3200	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	7	
2. Specific Gravity @ 60/60 F.	0.993	
3. CaCO ₃ Saturation Index @ 80 F.	+0.031	'Calcium Carbonate Scale Possible'
@ 140 F.	+0.731	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	500	/	20.1	=	24.88
8. Magnesium (Mg++)	365	/	12.2	=	29.88
9. Sodium (Na+) Calculated	-562	/	23.0	=	-24.43
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

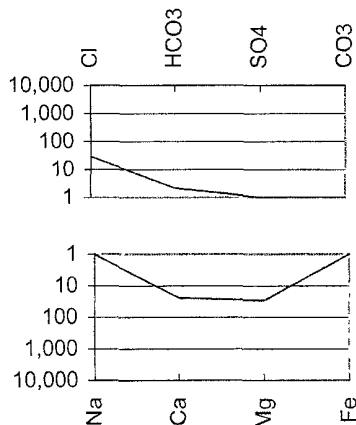
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	132	/	61.1	=	2.16
14. Sulfate (SO ₄ =)	0	/	48.8	=	0.00
15. Chloride (Cl-)	1,000	/	35.5	=	28.17

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	1,434				
18. Total Hardness As CaCO ₃	2,750				
Calcium Sulfate Solubility @ 90 F.	1,361				
20. Resistivity (Measured)	2.200	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	2.16	=	175
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	22.72	=	1,261
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	29.88	=	1,423
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-24.43	=	-1,428

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CAPITAN CHEMICAL WATER ANALYSIS REPORT

Lease Name :	Lynx Petroleum	Date Sampled :	08/27/07
Well Number :	3300	Capitan Rep. :	Joe Hughes
Location :	Eddy BD #2	Company Rep. :	Larry Scott
	Eddy County , New Mexico		

ANALYSIS

1. pH	6.5	
2. Specific Gravity @ 60/60 F.	1.007	
3. CaCO3 Saturation Index @ 80 F.	-0.164	
@ 140 F.	+0.536	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

<u>Cations</u>	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	800	/	20.1	=	39.80
8. Magnesium (Mg++)	365	/	12.2	=	29.88
9. Sodium (Na+) Calculated	-892	/	23.0	=	-38.79
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

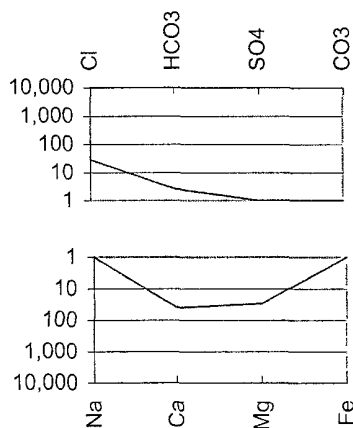
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	166	/	61.1	=	2.72
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	1,000	/	35.5	=	28.17

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0 00
17. Total Dissolved Solids	1,438				
18. Total Hardness As CaCO3	3,500				
Calcium Sulfate Solubility @ 90 F.	1,093				
20 Resistivity (Measured)	2.175	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	2.72	=	220
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	37.09	=	2,058
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	29.88	=	1,423
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-38.79	=	-2,268

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	3400	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	6.4	
2. Specific Gravity @ 60/60 F.	1.007	
3. CaCO3 Saturation Index @ 80 F.	-0.541	
	@ 140 F.	+0.159 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	600	/	20.1	=	29.85
8. Magnesium (Mg++)	122	/	12.2	=	9.96
9. Sodium (Na+) Calculated	2,368	/	23.0	=	102.95
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

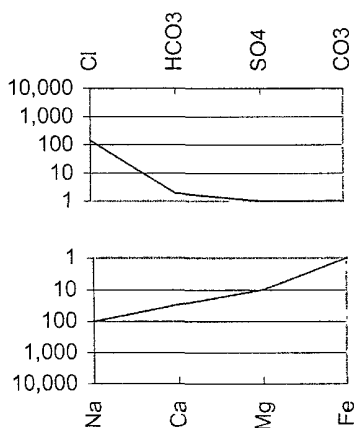
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	117	/	61.1	=	1.92
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	5,000	/	35.5	=	140.85

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	8,207				
18. Total Hardness As CaCO3	2,000				
Calcium Sulfate Solubility @ 90 F.	1,959				
20. Resistivity (Measured)	2.400	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	1.92	=	155
CaSO4	68.07	X	0.00	=	0
CaCl2	55.50	X	27.93	=	1,550
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	9.96	=	474
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	102.95	=	6,019

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

Lease Name : Lynx Petroleum
Well Number : 3500
Location : Eddy County , New Mexico
Date Sampled : 08/27/07
Capitan Rep. : Joe Hughes
Company Rep. : Larry Scott

ANALYSIS

1. pH 7
2. Specific Gravity @ 60/60 F. 1.006
3. CaCO₃ Saturation Index @ 80 F. +0.223 'Calcium Carbonate Scale Possible'
- @ 140 F. +0.923 'Calcium Carbonate Scale Possible'

Dissolved Gasses

- 4 Hydrogen Sulfide 0 PPM
- 5 Carbon Dioxide 0 PPM
- 6 Dissolved Oxygen Not Determined

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	600	/	20.1	=	29.85
8. Magnesium (Mg++)	243	/	12.2	=	19.92
9. Sodium (Na+) Calculated	2,159	/	23.0	=	93.87
10 Barium (Ba++)	Not Determined	/	68.7	=	0.00

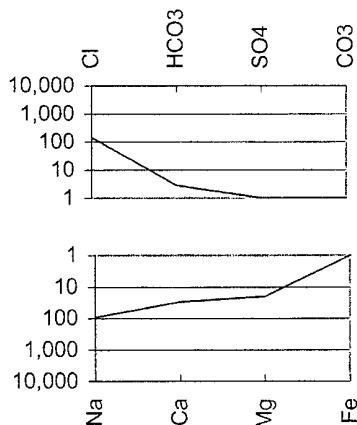
Anions

11 Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	171	/	61.1	=	2.80
14. Sulfate (SO ₄ =)	0	/	48.8	=	0.00
15. Chloride (Cl-)	5,000	/	35.5	=	140.85

Other

16. Soluble Iron (Fe) 0 / 18.2 = 0.00
17. Total Dissolved Solids 8,173
18. Total Hardness As CaCO₃ 2,500
- Calcium Sulfate Solubility @ 90 F. 1,959
20. Resistivity (Measured) 2.000 Ohm/Meters @ 84 Degrees (F)

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	2.80	=	227
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	27.06	=	1,502
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	19.92	=	948
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	93.87	=	5,488

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	3600	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	6.8	
2. Specific Gravity @ 60/60 F.	1.009	
3. CaCO3 Saturation Index @ 80 F.	-0.363	
	@ 140 F.	+0.497 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	700	/	20.1	=	34.83
8. Magnesium (Mg++)	668	/	12.2	=	54.77
9. Sodium (Na+) Calculated	1,236	/	23.0	=	53.72
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

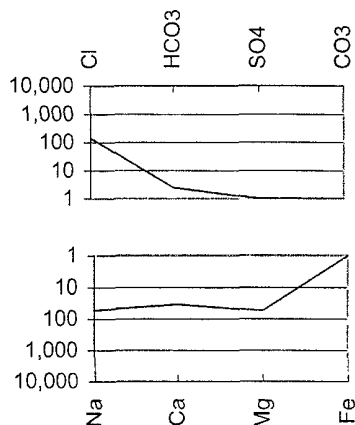
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	151	/	61.1	=	2.48
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	5,000	/	35.5	=	140.85

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	7,755				
18. Total Hardness As CaCO3	4,500				
Calcium Sulfate Solubility @ 90 F.	1,852				
20. Resistivity (Measured)	1.800	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	2.48	=	201
CaSO4	68.07	X	0.00	=	0
CaCl2	55.50	X	32.35	=	1,795
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	54.77	=	2,608
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	53.72	=	3,141

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CAPITAN CHEMICAL
WATER ANALYSIS REPORT

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	3700	Capitan Rep. : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	6.5	
2. Specific Gravity @ 60/60 F.	1.006	
3. CaCO3 Saturation Index @ 80 F.	-0.441	
	@ 140 F.	+0.259 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	600	/	20.1	=	29.85
8. Magnesium (Mg++)	182	/	12.2	=	14.94
9. Sodium (Na+) Calculated	-986	/	23.0	=	-42.87
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

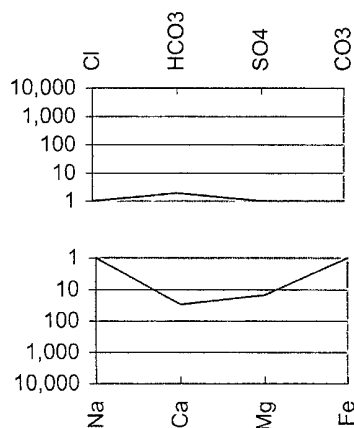
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	117	/	61.1	=	1.92
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	0	/	35.5	=	0.00

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	-87				
18. Total Hardness As CaCO3	2,250				
Calcium Sulfate Solubility @ 90 F.	807				
20. Resistivity (Measured)	2 100	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	1.92	=	155
CaSO4	68.07	X	0.00	=	0
CaCl2	55.50	X	27.93	=	1,550
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	14.94	=	711
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	-42.87	=	-2,506

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

Lease Name :	Lynx Petroleum	Date Sampled : 08/27/07
Well Number :	3800	Capitan Rep. : Joe Hughes
Location :	Eddy BD #2	Company Rep. : Larry Scott
	Eddy County , New Mexico	

ANALYSIS

1. pH	6.5	
2. Specific Gravity @ 60/60 F.	1.005	
3. CaCO3 Saturation Index @ 80 F.	-0.046	
	@ 140 F.	+0.654 'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	700	/	20.1	=	34.83
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	-707	/	23.0	=	-30.75
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

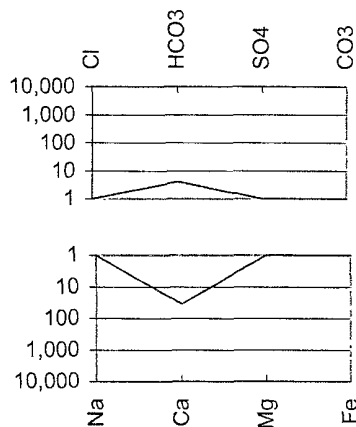
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO3=)	0	/	30.0	=	0.00
13. Bicarbonate (HCO3-)	249	/	61.1	=	4.07
14. Sulfate (SO4=)	0	/	48.8	=	0.00
15. Chloride (Cl-)	0	/	35.5	=	0.00

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	242				
18. Total Hardness As CaCO3	1,750				
Calcium Sulfate Solubility @ 90 F.	737				
20. Resistivity (Measured)	2.200	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	4.07	=	330
CaSO4	68.07	X	0.00	=	0
CaCl2	55.50	X	30.75	=	1,707
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	0.00	=	0
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	-30.75	=	-1,798

**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	3900	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	7.5	
2. Specific Gravity @ 60/60 F.	1.005	
3. CaCO ₃ Saturation Index @ 80 F.	+0.559	'Calcium Carbonate Scale Possible'
@ 140 F.	+1.259	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	0	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	800	/	20.1	=	39.80
8. Magnesium (Mg++)	0	/	12.2	=	0.00
9. Sodium (Na+) Calculated	-623	/	23.0	=	-27.10
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

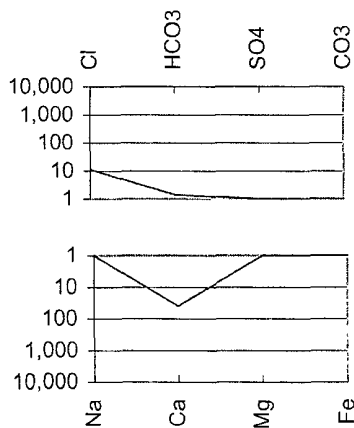
Anions

	mg/L	/	Eq. Wt.	=	MEQ/L
11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	88	/	61.1	=	1.44
14. Sulfate (SO ₄ =)	0	/	48.8	=	0.00
15. Chloride (Cl-)	400	/	35.5	=	11.27

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	665				
18. Total Hardness As CaCO ₃	2,000				
Calcium Sulfate Solubility @ 90 F.	676				
20. Resistivity (Measured)	1.850	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	1.44	=	117
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	38.36	=	2,129
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	0.00	=	0
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-27.10	=	-1,584

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

Lease Name :	Lynx Petroleum
Well Number :	4000
Location :	Eddy BD #2
	Eddy County , New Mexico

Date Sampled : 08/27/07
Capitan Rep. : Joe Hughes
Company Rep. : Larry Scott

ANALYSIS

1. pH	7	
2. Specific Gravity @ 60/60 F.	1.006	
3 CaCO ₃ Saturation Index @ 80 F.	+0.263	'Calcium Carbonate Scale Possible'
@ 140 F.	+0.963	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

Cations	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	500	/	20.1	=	24.88
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9. Sodium (Na+) Calculated	-995	/	23.0	=	-43.28
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

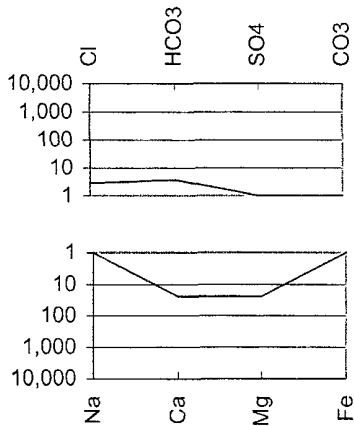
Anions

11	Hydroxyl (OH-)	0	/	17.0	=	0.00
12	Carbonate (CO3=)	0	/	30.0	=	0.00
13	Bicarbonate (HCO3-)	224	/	61.1	=	3.67
14	Sulfate (SO4=)	0	/	48.8	=	0.00
15	Chloride (Cl-)	100	/	35.5	=	2.82

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	133				
18. Total Hardness As CaCO3	2,500				
Calcium Sulfate Solubility @ 90 F.	888				
20. Resistivity (Measured)	1.950	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	3.67	=	298
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	21.20	=	1,177
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	24.90	=	1,186
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71 03	X	0.00	=	0
NaCl	58.46	X	-43.28	=	-2,530

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**CAPITAN CHEMICAL
WATER ANALYSIS REPORT**

	Lynx Petroleum	Date Sampled : 08/27/07
Lease Name :	4065	Capitan Rep. : Joe Hughes
Well Number :	Eddy BD #2	Company Rep. : Larry Scott
Location :	Eddy County , New Mexico	

ANALYSIS

1. pH	7	
2. Specific Gravity @ 60/60 F.	1.006	
3. CaCO ₃ Saturation Index @ 80 F.	+0.156	'Calcium Carbonate Scale Possible'
@ 140 F.	+0.856	'Calcium Carbonate Scale Possible'

Dissolved Gasses

4. Hydrogen Sulfide	0	PPM
5. Carbon Dioxide	10	PPM
6. Dissolved Oxygen	Not Determined	

Cations

	mg/L	/	Eq. Wt.	=	MEQ/L
7. Calcium (Ca++)	500	/	20.1	=	24.88
8. Magnesium (Mg++)	304	/	12.2	=	24.90
9. Sodium (Na+) Calculated	-1,014	/	23.0	=	-44.08
10. Barium (Ba++)	Not Determined	/	68.7	=	0.00

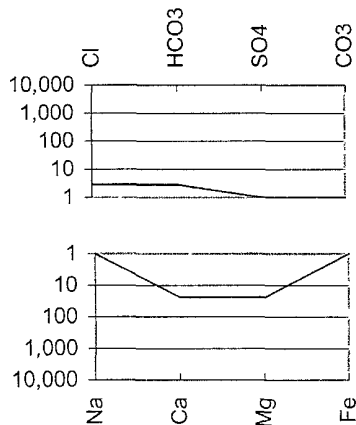
Anions

11. Hydroxyl (OH-)	0	/	17.0	=	0.00
12. Carbonate (CO ₃ =)	0	/	30.0	=	0.00
13. Bicarbonate (HCO ₃ -)	176	/	61.1	=	2.88
14. Sulfate (SO ₄ =)	0	/	48.8	=	0.00
15. Chloride (Cl-)	100	/	35.5	=	2.82

Other

16. Soluble Iron (Fe)	0	/	18.2	=	0.00
17. Total Dissolved Solids	66				
18. Total Hardness As CaCO ₃	2,500				
Calcium Sulfate Solubility @ 90 F.	888				
20. Resistivity (Measured)	1.950	Ohm/Meters	@ 84	Degrees (F)	

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO ₃) ₂	81.04	X	2.88	=	233
CaSO ₄	68.07	X	0.00	=	0
CaCl ₂	55.50	X	22.00	=	1,221
Mg(HCO ₃) ₂	73.17	X	0.00	=	0
MgSO ₄	60.19	X	0.00	=	0
MgCl ₂	47.62	X	24.90	=	1,186
NaHCO ₃	84.00	X	0.00	=	0
NaSO ₄	71.03	X	0.00	=	0
NaCl	58.46	X	-44.08	=	-2,577