

Cimarex Energy

Sandy & Forty-Niner Tank battery

Remediation Scope of Work

Incident ID nRM2014958679

June 2020

Purpose:

To complete the remediation of the tank battery area due to a produced water spill (May 26, 2020) at the Sandy & Forty-Niner central tank battery. The remediation will be completed per the following: the OCD and BLM guidance, XEC protocol and agency approval.

Phase II Scope of Work

1. Complete the EMC (electro-magnetic conductivity) survey of the surface area. The survey will utilize an EM 38 at a 0.5-meter and 1.0-meter sensitivity. Completed
2. Review the completed EMC survey to determine the impact onsite and if any impact occurred offsite. Completed – See Figure 1.
3. The area of off-site spill impact to the soil was on the NW side of the location and was approximately an area of 50' by 2'.
4. XEC will submit the scope of work for the remediation to the Artesia OCD offices for approval.

Phase III Scope of Work

1. XEC will request bids from an XEC approved contractor to remove the impacted soils on the NW side of the location. The area to excavate will be per the EMC survey and will be at a depth of 2.5 to 3.0 ft. to ensure adequate removal of the NaCl impacted soil, an estimate of 14 to 16 cubic yards of material to be removed.
2. The excavated soil will be transported to an approved New Mexico E&P waste treatment/disposal site for proper handling.

3. A 30 ml liner will be placed on the south side of the excavated area and then back-filled with clean soil.
4. The remaining area (as the noted on the attached Figure 1 - EMC survey), will remain in place until the lease is decommissioned per the approval of the OCD. Note: This area has minimal impact, is located within the central area of the tank battery, has minimal ability to migrate from the 12 to 15 inch depth due to the compacted caliche location/pad and the area groundwater is a significant distance (226 ft. from the surface).
5. Refer to Attachment A for reference to the depth of groundwater per the USGS database.

Figures



July 9, 2020

Mr. Stuart A. Wittenbach
Director of Environmental, Safety and Health
Cimarex Energy Co.
202 South Cheyenne Avenue
Suite 1000
Tulsa, Oklahoma 74103
and
Ms. Gloria Garza
Environmental, Safety and Health Specialist
Cimarex Energy Co.
600 North Marienfeld Street
Midland, Texas 79701

**Re: Results of EM38 Ground Conductivity Survey
Forty Niner Ridge 25 Federal 1H Lease,
Sandy Unit 20H Lease,
Sandy Federal 21H Lease, and
Sandy Federal 22H Lease Production Pad
Sections 23 and 24, Township 23 South, Range 30 East
Eddy County, New Mexico**

Dear Mr. Wittenbach and Ms. Garza:

At your request, Equus Environmental LLC has conducted an electromagnetic (EM) ground conductivity survey at the production pad for the above-referenced leases in Eddy County, New Mexico. It is Equus' understanding that a release of produced water had recently occurred at the site prior to the survey and the fluids were thought to be confined to the gravel production pad. The survey was conducted on Wednesday, June 3, 2020, using an EM38-MK2 meter (EM38) manufactured by Geonics, LTD. The EM38 has two sets of fixed coils; one with a 0.5-meter (m) intercoil separation and a second with a 1m intercoil separation. The meter coils have maximum depths of investigation of 2.5 feet and 5 feet, respectively, when operated in vertical dipole (VD) orientation. These conductivity measurements are output continuously and concurrently to a field computer. Both ground conductivities, in-phase readings (for metal/interference detection), and GPS positioning coordinates are recorded on a field computer at a frequency of two readings per second. With this information streaming to the field computer, Equus conducted a walking survey of the production pad using both east-west and north-south traverses.

The tabular results of the survey are presented in **Table 1**. The 0.5m and 1m ground conductivity measurements are provided in columns 5 and 6 of the table, respectively. Column 9 of the **Table 1** is simply the difference between the 1m and 0.5m conductivity values (=1m-0.5m). **Figure 1** provides a graphical presentation of the EM38 0.5m VD conductivity results. **Figure 2** provides a graphical presentation of the EM38 1m VD conductivity results. **Figure 3** provides a graphical

presentation of the values posted in Column 9 of **Table 1** (the differences in ground conductivities between 1m and 0.5m VD measurements). **Chart 1** is a scatter plot of the differences between the 1m and 0.5m conductivities (1M – 0.5M conductivities).

The area surrounding the lease pad appeared to have widespread hummocky topography consistent with dunal sand deposits. These sands are visually apparent across the area. Ground conductivities in such lithologic profiles are typically low and we found them to be generally in the range of approximately 20 mmhos/m.

Referring to **Figure 1**, the 0.5m conductivity results (maximum depth of investigation 2.5 feet), you can see ground conductivities increase abruptly in the release areas. The highest 0.5m ground conductivity level was found to be 461 mmhos/m, and the 1m maximum level rose only to 238 mmhos/m. The brine impacts appear to have sourced in the southeast portion of the pad (just west of a long N-S line of 12 storage tanks) and flowed north and then northwest to the northwest corner of the pad. The flow path divided into two separate branches as it flowed towards the west-northwest. A small berm along the northern edge of the pad appears to have kept the fluids from flowing offsite to the north. A small break in this berm, in the northwest corner of the pad, allowed a small volume of the fluids to flow off the pad and towards the west. However, Equus followed the flow path and the impacts decreased rapidly to background levels just off the northwest corner of the pad just north of a cattleguard.

Figure 2 presents the 1m conductivity results (maximum depth of investigation 5 feet). A comparison of the boundaries and magnitude of conductivity values between the 0.5m and 1m results indicate that the deeper conductivities are more narrow and lower level. The shallow 0.5m conductivities results are clearly much greater than the deeper 1m results.

Referring to **Table 1**, and as stated above, Equus has added a 9th column that provides the differences between the 1m/VD results and the 0.5m/VD results. When ground conductivities measured by the 1m coils (depth of investigation 5 feet) are greater than the ground conductivities measured by the shallower 0.5m coils (depth of investigation 2.5 feet) this indicates where production brines may have infiltrated below 2.5 feet and, in this case, potentially impacted native soils beneath the pad. Conversely, where the shallow conductivities are greater than the deeper conductivities, this indicates areas where the impacts have remained near surface. **Chart 1** provides a simple scatter plot of the difference between the shallow and deep conductivity readings (1m – 0.5m). Negative values indicate shallow brine impacts, and positive values indicate brine impacts that extend below 2.5 feet and likely down to or below 5 feet. From this plot it is clear that the differences are strongly negative (shallow levels generally higher than the deep conductivities). Very few 1m readings exceed the 0.5m readings. These differences are shown graphically on **Figure 3**. It is interesting to note that in the areas of greatest brine impacts the differences in conductivity remain predominantly negative and indicate the brines remained surficial and had little penetration vertically into the pad materials or underlying native soils.

Equus concludes the following regarding these EM results:

1. The brine fluids that were released at the site appear to have remained almost entirely on the production pad itself.
2. The brine fluids flowed from the apparent source area, located in the southeast portion of the survey area (just west of tank battery), towards the north and then northwest.

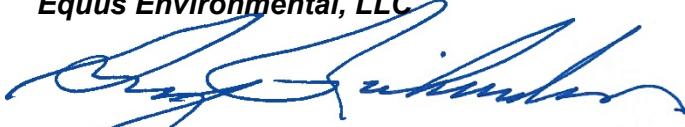
Mr. Stuart Wittenbach and Ms. Gloria Garza
EM38 Ground Conductivity Survey – Federal and Sandy Leases

Page 3 of 3
July 9, 2020

3. An insignificant volume of brine fluids appears to have exited the pad in the northwest corner and then flowed towards the west a distance of less than 50 feet. The width of this flow path is less than 2 feet.
4. Background conductivities are low and generally about 20 mmhos/m.
5. The brine impacts resulted in significant increases in ground conductivities that were as high as 461 mmhos/m in the shallow 0.5m readings and 238 mmhos/m in the deeper 1m readings.
6. The shallow conductivity measurements appear much greater than the deeper measurements in areal extent and magnitude of conductivity levels.
7. A plot of the differences between the shallow and deep conductivity measurements indicate that the brine impacts did not infiltrate below 2.5 feet to any significant degree.

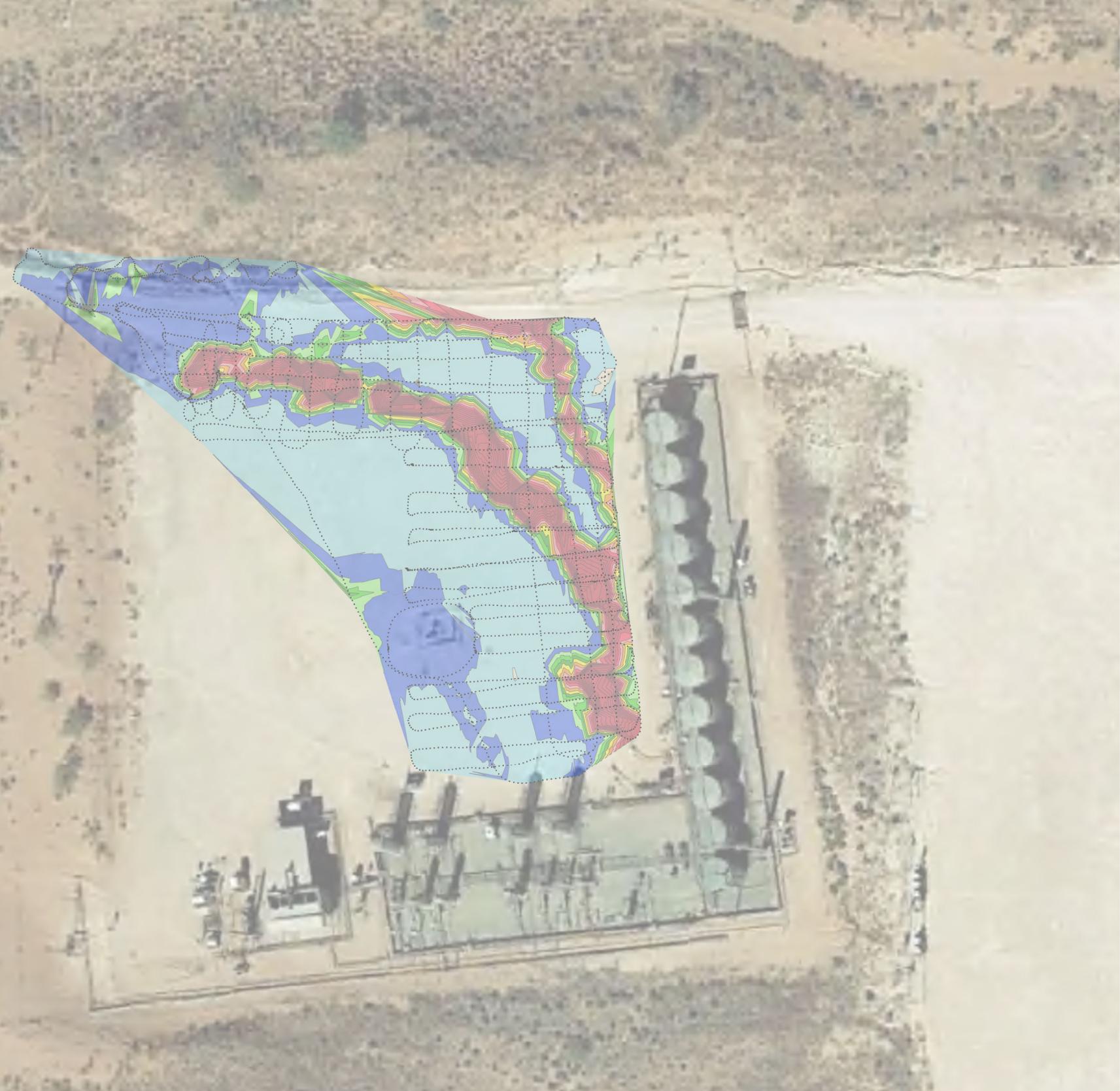
If you have any questions regarding this EM ground conductivity survey, please do not hesitate to contact me at 918-960-4630. We appreciate this opportunity to be of service to Cimarex Energy Co.

Sincerely,
Equus Environmental, LLC



George H. (Buddy) Richardson, P.G.
Senior Principal

Enclosures: Figure 1 – EM38 0.5m/VD Conductivity Survey Results
Figure 2 – EM38 1m/VD Conductivity Survey Results
Figure 3 – Ground Conductivity Differences 1m to 0.5m
Chart 1 – Scatter Plot of Conductivity Differences 1m to 0.5m
Table 1 – Summary of EM38 Ground Conductivity Survey

**NOTES:**

- 1) EM SURVEY PERFORMED BY EQUUS ENVIRONMENTAL, LLC ON JUNE 3, 2020
EM38-MK2 METER CONFIGURED IN VERTICAL DIPOLE MODE.
- 2) AERIAL PHOTOGRAPH DATED NOVEMBER 2, 2017, GOOGLE EARTH IMAGE SERVICES (GEIS), GEOREFERENCED IMAGE
- 3) APPARENT CONDUCTIVITY IN MILLSIEMENS PER METER (mS/m)
- 4) MAXIMUM DEPTH OF INVESTIGATION APPROXIMATELY 2.5 FEET BELOW GROUND SURFACE.



DOCUMENT TITLE
RESULTS OF EM38 SURVEY

FIGURE TITLE
EM38 0.5-METER VD CONDUCTIVITY SURVEY RESULTS

CLIENT CIMAREX ENERGY

PROJECT NUMBER XECSANDY:H2020

LOCATION SANDY WELL PAD
PERMIAN BASIN-HOBBS, EDDY CO., NEW MEXICO

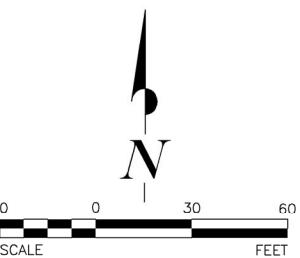
FIGURE NUMBER 1

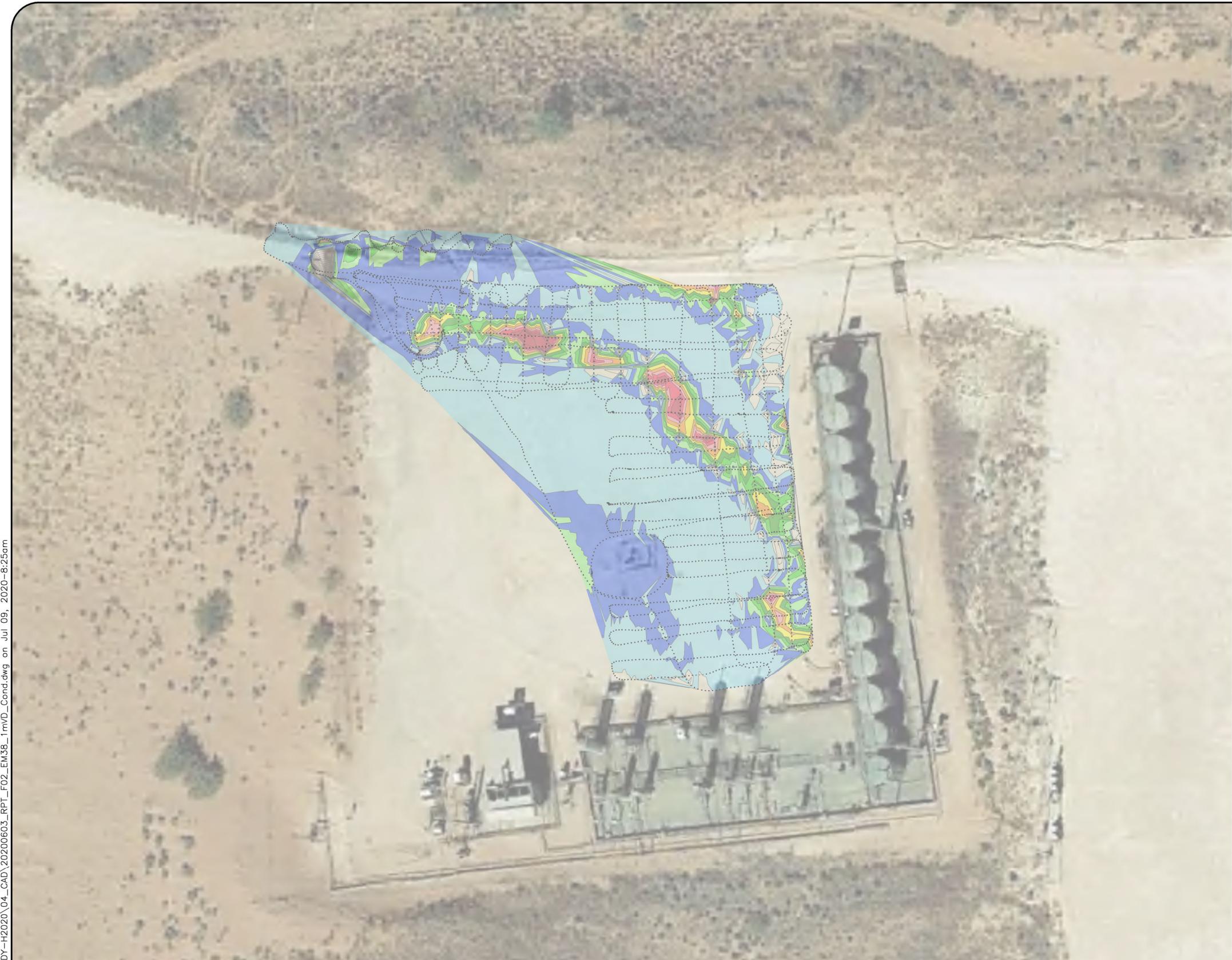
LEGEND**EM38 0.5-METER VERTICAL DIPOLE TERRAIN CONDUCTIVITY SURVEY**

LOCATIONS OF EM38-MK2 GROUND CONDUCTIVITY MEASUREMENTS IN mS/m

APPARENT TERRAIN CONDUCTIVITIES

Minimum mS/m	Maximum mS/m	Color
0	20	Light Blue
20	40	Dark Blue
40	60	Light Green
60	80	Dark Green
80	100	Light Yellow
100	120	Dark Yellow
120	140	Orange
140	160	Red-Orange
160	180	Red
180	>200	Dark Red



**NOTES:**

- 1) EM SURVEY PERFORMED BY EQUUS ENVIRONMENTAL, LLC ON JUNE 3, 2020. EM38-MK2 METER CONFIGURED IN VERTICAL DIPOLE MODE.
- 2) AERIAL PHOTOGRAPH DATED NOVEMBER 2, 2017, GOOGLE EARTH IMAGE SERVICES (GEIS), GEOREFERENCED IMAGE
- 3) APPARENT CONDUCTIVITY IN MILLISIEMENS PER METER (mS/m)
- 4) MAXIMUM DEPTH OF INVESTIGATION APPROXIMATELY 5 FEET BELOW GROUND SURFACE.



DOCUMENT TITLE
RESULTS OF EM38 SURVEY

FIGURE TITLE
EM38 1.0-METER VD CONDUCTIVITY SURVEY RESULTS

CLIENT CIMAREX ENERGY

PROJECT NUMBER XECSANDY:H2020

LOCATION SANDY WELL PAD
PERMIAN BASIN-HOBBS, EDDY CO., NEW MEXICO

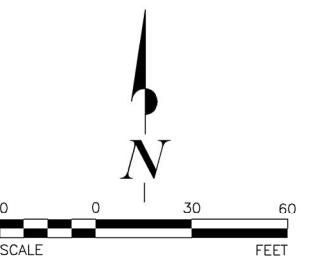
FIGURE NUMBER 2

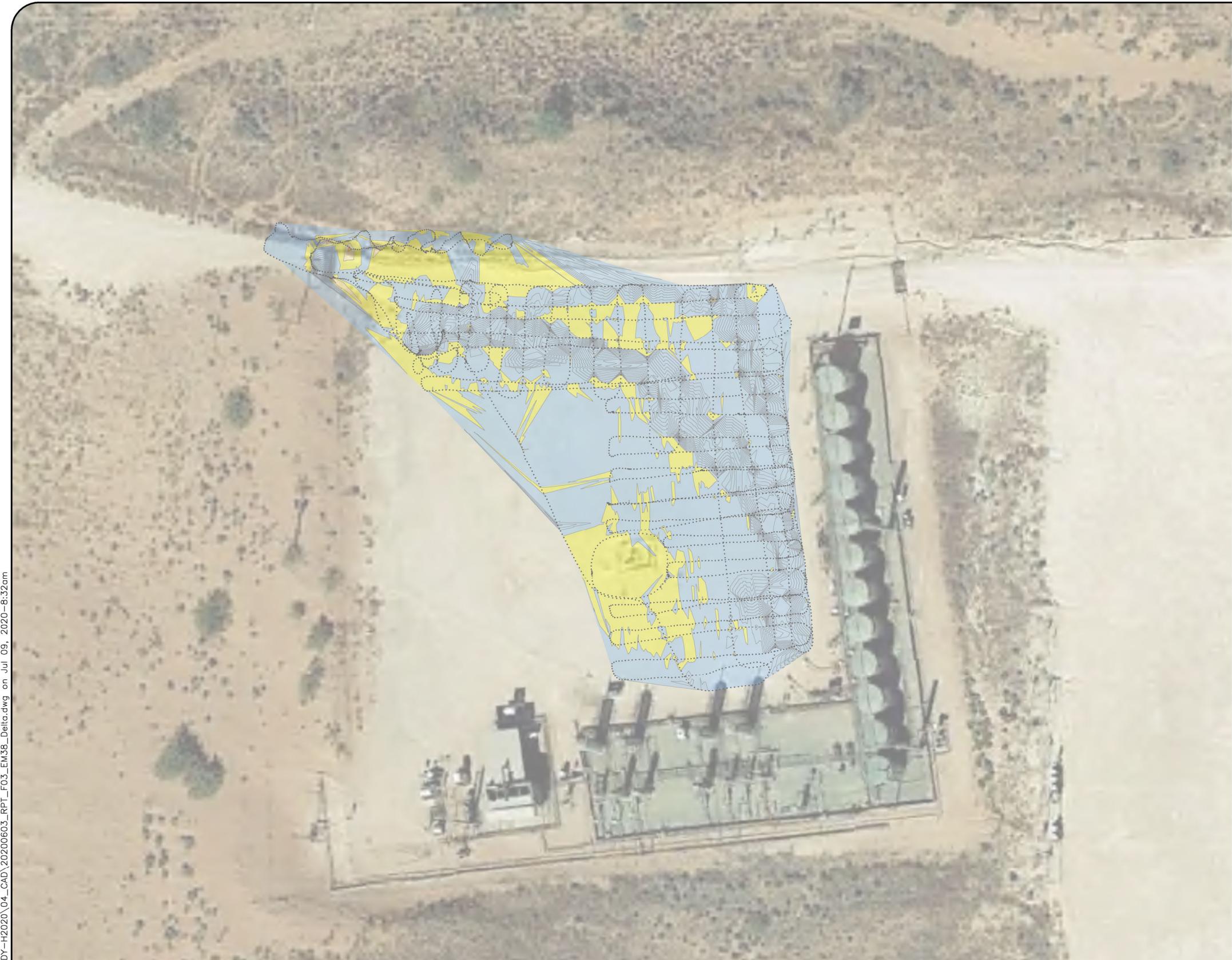
LEGEND**EM38 1.0-METER VERTICAL DIPOLE TERRAIN CONDUCTIVITY SURVEY**

 LOCATIONS OF EM38-MK2 GROUND CONDUCTIVITY MEASUREMENTS IN mS/m

APPARENT TERRAIN CONDUCTIVITIES

Minimum mS/m	Maximum mS/m	Color
0	10	Light Blue
10	20	Dark Blue
20	30	Light Green
30	40	Dark Green
40	50	Yellow-Green
50	60	Yellow
60	70	Orange-Yellow
70	80	Orange
80	90	Red-Orange
90	>100	Dark Red



**NOTES:**

- 1) EM SURVEY PERFORMED BY EQUUS ENVIRONMENTAL, LLC ON JUNE 3, 2020. EM38-MK2 METER CONFIGURED IN VERTICAL DIPOLE MODE.
- 2) AERIAL PHOTOGRAPH DATED NOVEMBER 2, 2017, GOOGLE EARTH IMAGE SERVICES (GEIS), GEOREFERENCED IMAGE
- 3) APPARENT CONDUCTIVITY IN MILLSIEMENS PER METER (mS/m)
- 4) MAXIMUM DEPTH OF INVESTIGATION APPROXIMATELY 5 FEET BELOW GROUND SURFACE.



DOCUMENT TITLE
RESULTS OF EM38 SURVEY

FIGURE TITLE
GROUND CONDUCTIVITY DIFFERENCES 1m to 0.5m VD

CLIENT CIMAREX ENERGY

PROJECT NUMBER XECSANDY:H2020

LOCATION SANDY WELL PAD
PERMIAN BASIN-HOBBS, EDDY CO., NEW MEXICO

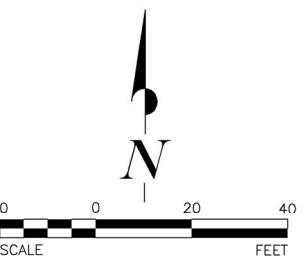
FIGURE NUMBER 3

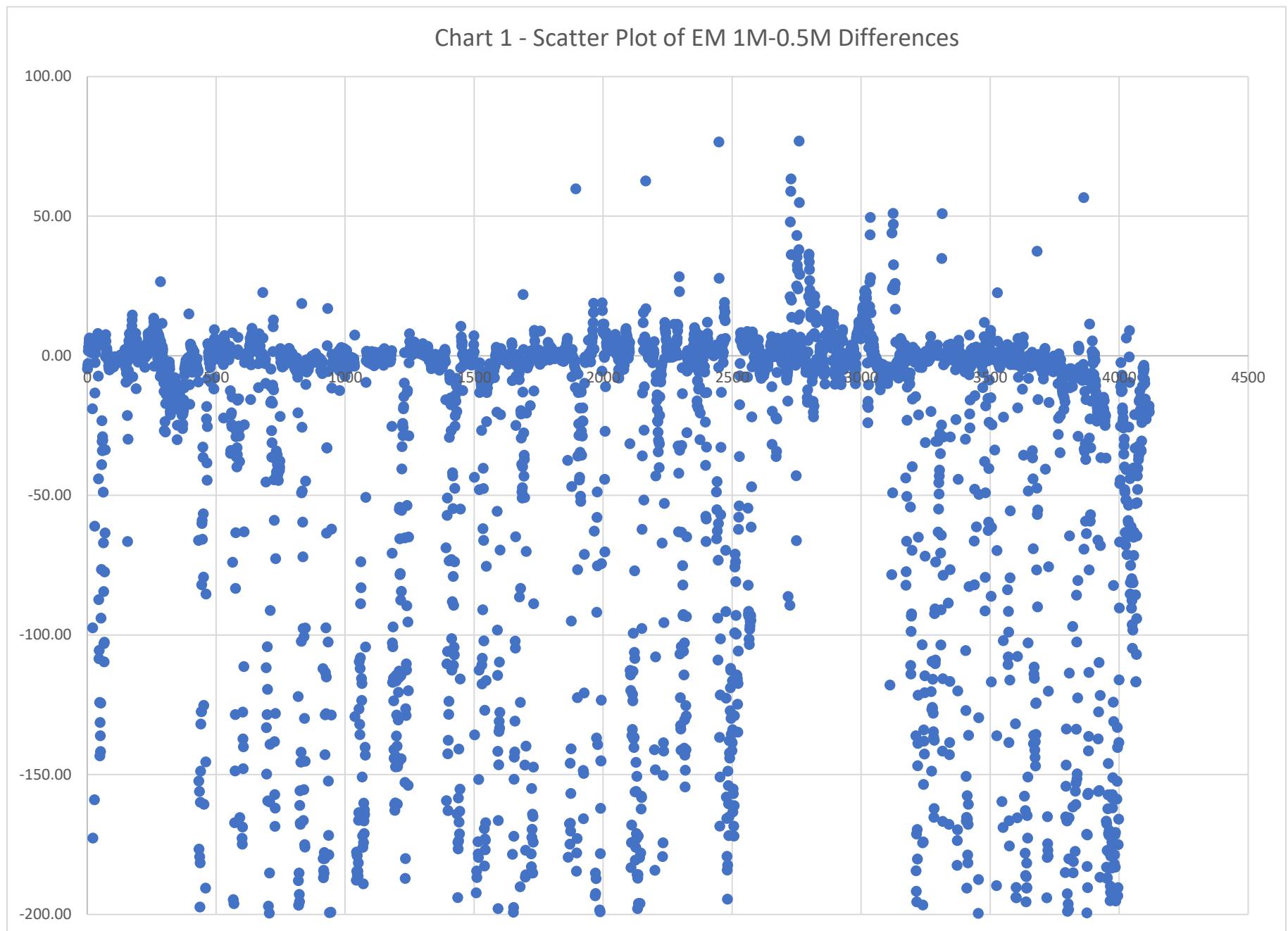
LEGEND**EM38 GROUND CONDUCTIVITY DIFFERENCES 1m TO 0.5m VD**

LOCATIONS OF EM38-MK2 GROUND CONDUCTIVITY MEASUREMENTS IN mS/m

APPARENT TERRAIN CONDUCTIVITIES

Minimum mS/m	Maximum mS/m	Color
<200	0	Blue
0	20	Yellow
20	40	Light Orange
40	60	Orange
60	80	Magenta





Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1	0.00	32.28445294	-103.84530992	25.23	20.55	-0.02	0.38	-4.69
2	0.53	32.28445294	-103.84530993	24.45	20.12	-0.02	0.36	-4.34
3	1.05	32.28445289	-103.84530982	25.16	21.68	-0.02	0.37	-3.48
4	1.57	32.28445268	-103.84530967	24.49	21.68	-0.05	0.41	-2.81
5	2.09	32.28445190	-103.84530939	22.81	24.57	-0.07	0.42	1.76
6	2.61	32.28445105	-103.84530863	22.93	26.02	-0.08	0.42	3.09
7	3.14	32.28444998	-103.84530670	23.20	27.66	-0.08	0.44	4.45
8	3.66	32.28444831	-103.84530467	23.13	28.87	-0.09	0.43	5.74
9	4.18	32.28444563	-103.84530246	22.07	28.40	-0.09	0.41	6.33
10	4.70	32.28444319	-103.84529944	22.03	26.33	-0.09	0.34	4.30
11	5.22	32.28444103	-103.84529549	20.43	25.16	-0.11	0.30	4.73
12	5.75	32.28443941	-103.84529234	20.74	24.84	-0.12	0.28	4.10
13	6.27	32.28443825	-103.84528984	21.17	24.26	-0.13	0.29	3.09
14	6.79	32.28443776	-103.84528834	23.59	26.02	-0.12	0.25	2.42
15	7.32	32.28443766	-103.84528739	24.65	26.48	-0.12	0.26	1.84
16	7.84	32.28443759	-103.84528701	25.23	26.45	-0.12	0.23	1.21
17	8.36	32.28443754	-103.84528684	26.13	27.31	-0.11	0.27	1.17
18	8.88	32.28443822	-103.84528680	26.84	27.81	-0.11	0.24	0.98
19	9.40	32.28443907	-103.84528679	25.43	27.15	-0.12	0.22	1.72
20	9.92	32.28444086	-103.84528474	29.77	10.78	-0.13	0.22	-18.99
21	10.44	32.28444277	-103.84528244	78.63	-18.79	-0.13	0.24	-97.42
22	10.97	32.28444340	-103.84528149	124.45	-48.24	-0.12	0.21	-172.70
23	11.49	32.28444395	-103.84528064	146.68	-60.90	-0.11	0.24	-207.58
24	12.01	32.28444399	-103.84528059	152.50	-63.98	-0.10	0.25	-216.48
25	12.54	32.28444400	-103.84528056	150.39	-64.49	-0.10	0.25	-214.88
26	13.06	32.28444380	-103.84528067	147.73	-67.31	-0.10	0.27	-215.04
27	13.58	32.28444322	-103.84528122	143.09	-64.65	-0.11	0.24	-207.73
28	14.10	32.28444142	-103.84528322	111.48	-47.50	-0.12	0.22	-158.98
29	14.63	32.28443978	-103.84528495	50.39	-10.66	-0.13	0.21	-61.06
30	15.15	32.28443851	-103.84528610	29.53	16.13	-0.12	0.24	-13.40
31	15.67	32.28443745	-103.84528671	27.70	25.20	-0.10	0.24	-2.50
32	16.19	32.28443671	-103.84528648	26.64	27.46	-0.11	0.24	0.82
33	16.71	32.28443648	-103.84528493	25.86	28.44	-0.11	0.26	2.58
34	17.24	32.28443680	-103.84528200	23.32	26.06	-0.12	0.20	2.74
35	17.76	32.28443683	-103.84527792	22.23	26.52	-0.10	0.20	4.30
36	18.28	32.28443665	-103.84527297	21.76	26.06	-0.10	0.20	4.30
37	18.80	32.28443709	-103.84526801	20.66	25.94	-0.13	0.18	5.27
38	19.33	32.28443785	-103.84526301	21.72	28.20	-0.11	0.21	6.48
39	19.85	32.28443970	-103.84525986	24.14	30.39	-0.11	0.24	6.25
40	20.37	32.28444194	-103.84525733	26.21	33.05	-0.12	0.18	6.84
41	20.89	32.28444420	-103.84525436	30.78	38.71	-0.11	0.21	7.93
42	21.41	32.28444648	-103.84525127	28.98	36.17	-0.11	0.21	7.19
43	21.93	32.28444908	-103.84524929	31.95	24.61	-0.12	0.18	-7.34
44	22.46	32.28445172	-103.84524741	53.79	9.69	-0.11	0.21	-44.10
45	22.98	32.28445430	-103.84524654	90.39	3.05	-0.12	0.22	-87.34
46	23.50	32.28445686	-103.84524564	117.54	9.06	-0.12	0.20	-108.48
47	24.03	32.28445920	-103.84524425	130.86	25.31	-0.13	0.19	-105.55
48	24.55	32.28446151	-103.84524315	154.84	30.66	-0.12	0.21	-124.18
49	25.07	32.28446371	-103.84524346	180.12	36.84	-0.13	0.19	-143.28
50	25.59	32.28446580	-103.84524353	188.56	57.19	-0.13	0.19	-131.37
51	26.11	32.28446760	-103.84524286	205.90	69.84	-0.13	0.20	-136.05
52	26.64	32.28446928	-103.84524288	218.20	76.48	-0.13	0.20	-141.72
53	27.16	32.28447073	-103.84524425	211.52	87.15	-0.13	0.20	-124.38
54	27.68	32.28447190	-103.84524448	186.68	92.73	-0.13	0.17	-93.95
55	28.20	32.28447271	-103.84524314	164.96	88.44	-0.10	0.15	-76.52
56	28.73	32.28447361	-103.84524180	106.09	67.07	-0.02	0.27	-39.02
57	29.25	32.28447460	-103.84524043	79.45	56.13	-0.02	0.24	-23.32
58	29.77	32.28447504	-103.84524003	99.30	68.59	0.02	0.25	-30.70
59	30.29	32.28447510	-103.84524031	114.38	80.35	0.01	0.34	-34.02
60	30.81	32.28447493	-103.84524066	102.58	73.56	-0.01	0.38	-29.02
61	31.33	32.28447465	-103.84524105	98.16	67.93	0.02	0.32	-30.23
62	31.86	32.28447459	-103.84524131	122.27	73.44	-0.07	0.17	-48.83
63	32.38	32.28447460	-103.84524152	148.75	81.76	-0.11	0.14	-66.99
64	32.90	32.28447434	-103.84524152	165.12	80.70	-0.12	0.15	-84.41
65	33.43	32.28447403	-103.84524148	178.28	75.23	-0.12	0.15	-103.05
66	33.95	32.28447250	-103.84524058	178.28	68.63	-0.11	0.20	-109.65
67	34.47	32.28447086	-103.84523963	165.59	62.97	-0.12	0.18	-102.62
68	34.99	32.28446804	-103.84523923	126.95	49.49	-0.10	0.16	-77.46
69	35.51	32.28446511	-103.84523860	92.38	28.95	-0.12	0.17	-63.44
70	36.04	32.28446129	-103.84523607	49.61	15.90	-0.12	0.16	-33.71
71	36.56	32.28445753	-103.84523331	33.09	32.70	-0.12	0.16	-0.39
72	37.08	32.28445418	-103.84522969	22.46	30.00	-0.11	0.18	7.54
73	37.60	32.28445073	-103.84522601	18.13	23.32	-0.12	0.17	5.20
74	38.13	32.28444708	-103.84522221	17.38	20.27	-0.11	0.21	2.89
75	38.65	32.28444350	-103.84521849	17.31	18.59	-0.11	0.15	1.29
76	39.17	32.28444003	-103.84521485	15.94	18.44	-0.12	0.20	2.50
77	39.69	32.28443672	-103.84521107	15.47	16.84	-0.11	0.20	1.37

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
78	40.21	32.28443356	-103.84520704	14.88	14.84	-0.12	0.14	-0.04
79	40.74	32.28443079	-103.84520383	14.38	14.02	-0.12	0.18	-0.35
80	41.26	32.28442839	-103.84520134	14.26	14.22	-0.12	0.14	-0.04
81	41.78	32.28442731	-103.84520057	14.88	15.00	-0.12	0.20	0.12
82	42.30	32.28442706	-103.84520088	15.23	13.56	-0.08	0.21	-1.68
83	42.82	32.28442701	-103.84520094	17.03	13.40	-0.04	0.26	-3.63
84	43.35	32.28442705	-103.84520089	17.23	13.20	-0.02	0.31	-4.02
85	43.87	32.28442702	-103.84520099	18.44	13.91	0.00	0.31	-4.53
86	44.39	32.28442696	-103.84520113	18.75	13.67	0.00	0.31	-5.08
87	44.91	32.28442704	-103.84520140	18.95	13.98	-0.04	0.31	-4.96
88	45.44	32.28442715	-103.84520168	18.36	14.45	-0.04	0.33	-3.91
89	45.96	32.28442717	-103.84520157	18.16	13.52	-0.05	0.33	-4.65
90	46.48	32.28442718	-103.84520144	18.67	14.22	-0.05	0.33	-4.45
91	47.00	32.28442727	-103.84520136	17.77	14.14	-0.05	0.38	-3.63
92	47.53	32.28442733	-103.84520127	17.54	13.32	-0.05	0.38	-4.22
93	48.05	32.28442724	-103.84520112	18.05	14.22	-0.06	0.39	-3.83
94	48.57	32.28442718	-103.84520102	17.85	14.06	-0.06	0.36	-3.79
95	49.09	32.28442725	-103.84520108	17.27	13.56	-0.06	0.40	-3.71
96	49.61	32.28442729	-103.84520113	18.48	15.04	-0.06	0.37	-3.44
97	50.14	32.28442723	-103.84520116	16.80	13.83	-0.07	0.38	-2.97
98	50.66	32.28442719	-103.84520119	17.50	14.18	-0.07	0.39	-3.32
99	51.18	32.28442716	-103.84520122	18.24	14.30	-0.07	0.41	-3.95
100	51.70	32.28442686	-103.84520127	18.09	15.12	-0.07	0.38	-2.97
101	52.23	32.28442625	-103.84520135	18.56	15.47	-0.07	0.39	-3.09
102	52.75	32.28442519	-103.84520033	18.01	13.91	-0.07	0.38	-4.10
103	53.27	32.28442376	-103.84519841	17.38	13.52	-0.03	0.34	-3.87
104	53.79	32.28442057	-103.84519597	15.74	12.77	-0.07	0.18	-2.97
105	54.32	32.28441638	-103.84519323	14.69	13.71	-0.11	0.16	-0.98
106	54.84	32.28441191	-103.84518992	14.34	12.73	-0.11	0.16	-1.60
107	55.36	32.28440733	-103.84518638	13.09	12.73	-0.09	0.17	-0.35
108	55.88	32.28440279	-103.84518251	14.57	12.85	-0.11	0.17	-1.72
109	56.40	32.28439823	-103.84517855	13.83	13.40	-0.10	0.16	-0.43
110	56.92	32.28439330	-103.84517443	14.45	13.32	-0.10	0.16	-1.13
111	57.44	32.28438829	-103.84517028	14.10	13.63	-0.10	0.17	-0.47
112	57.97	32.28438300	-103.84516655	14.02	12.73	-0.11	0.17	-1.29
113	58.49	32.28437772	-103.84516286	14.53	12.70	-0.11	0.15	-1.84
114	59.01	32.28437260	-103.84515950	15.23	14.06	-0.10	0.16	-1.17
115	59.54	32.28436748	-103.84515615	15.08	13.05	-0.11	0.16	-2.03
116	60.06	32.28436236	-103.84515292	15.23	14.30	-0.09	0.13	-0.94
117	60.58	32.28435735	-103.84514959	16.72	14.92	-0.10	0.13	-1.80
118	61.10	32.28435266	-103.84514590	17.03	14.92	-0.11	0.16	-2.11
119	61.62	32.28434822	-103.84514236	17.23	14.65	-0.11	0.16	-2.58
120	62.15	32.28434428	-103.84513914	17.07	14.73	-0.12	0.13	-2.34
121	62.67	32.28434060	-103.84513591	16.72	15.55	-0.10	0.17	-1.17
122	63.19	32.28433730	-103.84513268	16.13	15.23	-0.11	0.16	-0.90
123	63.71	32.28433349	-103.84512961	15.55	15.27	-0.10	0.16	-0.27
124	64.23	32.28432916	-103.84512673	15.39	14.57	-0.10	0.14	-0.82
125	64.76	32.28432503	-103.84512365	15.12	14.38	-0.11	0.15	-0.74
126	65.28	32.28432108	-103.84512043	15.20	13.87	-0.11	0.17	-1.33
127	65.80	32.28431738	-103.84511718	15.43	14.18	-0.11	0.16	-1.25
128	66.31	32.28431383	-103.84511394	14.96	15.12	-0.10	0.15	0.16
129	66.85	32.28431020	-103.84511073	15.59	15.00	-0.12	0.11	-0.59
130	67.37	32.28430663	-103.84510762	15.55	15.63	-0.12	0.15	0.08
131	67.89	32.28430230	-103.84510533	15.12	15.23	-0.10	0.14	0.12
132	68.41	32.28429781	-103.84510322	15.66	15.04	-0.10	0.13	-0.63
133	68.92	32.28429399	-103.84510180	15.04	15.16	-0.09	0.14	0.12
134	69.43	32.28429020	-103.84510043	16.45	15.04	-0.11	0.13	-1.41
135	69.96	32.28428519	-103.84509890	16.21	15.23	-0.12	0.14	-0.98
136	70.50	32.28428016	-103.84509721	15.86	15.08	-0.09	0.15	-0.78
137	71.02	32.28427588	-103.84509399	16.13	14.88	-0.11	0.14	-1.25
138	71.55	32.28427152	-103.84509086	16.09	15.27	-0.12	0.15	-0.82
139	72.07	32.28426681	-103.84508814	17.81	16.76	-0.11	0.15	-1.06
140	72.59	32.28426195	-103.84508537	17.15	16.48	-0.11	0.14	-0.66
141	73.11	32.28425670	-103.84508243	17.15	16.48	-0.10	0.15	-0.66
142	73.63	32.28425164	-103.84507950	17.77	16.99	-0.12	0.15	-0.78
143	74.16	32.28424692	-103.84507654	18.48	17.70	-0.10	0.15	-0.78
144	74.68	32.28424223	-103.84507367	17.97	17.31	-0.10	0.19	-0.66
145	75.20	32.28423757	-103.84507093	18.13	17.81	-0.08	0.21	-0.31
146	75.72	32.28423299	-103.84506811	15.04	17.23	-0.01	0.22	2.19
147	76.25	32.28422847	-103.84506520	18.87	19.22	-0.06	0.18	0.35
148	76.77	32.28422385	-103.84506226	23.87	22.50	-0.09	0.15	-1.37
149	77.29	32.28421916	-103.84505931	27.19	26.64	-0.11	0.15	-0.55
150	77.81	32.28421415	-103.84505664	30.70	26.25	-0.07	0.21	-4.45
151	78.33	32.28420897	-103.84505410	36.09	26.60	-0.09	0.19	-9.49
152	78.86	32.28420404	-103.84505163	39.18	32.93	-0.08	0.19	-6.25
153	79.38	32.28419915	-103.84504915	42.85	41.06	-0.10	0.18	-1.80
154	79.90	32.28419432	-103.84504688	41.88	39.34	-0.11	0.17	-2.54

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
155	80.42	32.28418948	-103.84504463	49.10	43.63	-0.08	0.18	-5.47
156	80.94	32.28418505	-103.84504253	69.49	48.09	0.05	0.28	-21.41
157	81.47	32.28418063	-103.84504042	92.66	26.13	0.23	-0.26	-66.52
158	81.99	32.28417611	-103.84503804	69.88	39.96	0.03	0.02	-29.92
159	82.51	32.28417155	-103.84503561	52.89	44.30	-0.05	0.25	-8.59
160	83.04	32.28416660	-103.84503279	49.61	44.26	-0.08	0.19	-5.35
161	83.56	32.28416158	-103.84502988	44.45	47.97	-0.11	0.15	3.52
162	84.08	32.28415651	-103.84502675	41.88	47.27	-0.09	0.19	5.39
163	84.60	32.28415149	-103.84502373	42.03	46.84	-0.10	0.16	4.81
164	85.12	32.28414661	-103.84502103	41.56	49.45	-0.09	0.19	7.89
165	85.65	32.28414166	-103.84501822	42.23	47.89	-0.10	0.20	5.66
166	86.17	32.28413660	-103.84501520	41.41	46.52	-0.11	0.19	5.12
167	86.69	32.28413162	-103.84501222	42.66	49.02	-0.10	0.23	6.37
168	87.21	32.28412676	-103.84500930	43.44	51.76	-0.09	0.24	8.32
169	87.74	32.28412165	-103.84500614	48.40	53.59	-0.08	0.30	5.20
170	88.26	32.28411630	-103.84500277	48.13	49.26	-0.08	0.29	1.13
171	88.78	32.28411099	-103.84499920	46.37	47.66	-0.07	0.39	1.29
172	89.30	32.28410568	-103.84499550	39.73	46.29	-0.07	0.42	6.56
173	89.82	32.28410067	-103.84499197	35.08	45.78	-0.05	0.55	10.70
174	90.35	32.28409575	-103.84498847	33.83	46.64	-0.02	0.79	12.81
175	90.87	32.28409085	-103.84498446	33.01	47.58	0.00	0.90	14.57
176	91.39	32.28408591	-103.84498027	29.69	35.20	0.03	0.50	5.51
177	91.91	32.28408215	-103.84497510	28.13	20.59	0.04	0.02	-7.54
178	92.44	32.28407855	-103.84496974	28.98	31.21	0.03	0.63	2.23
179	92.96	32.28407610	-103.84496377	30.20	36.80	-0.01	0.82	6.60
180	93.48	32.28407372	-103.84495771	27.23	35.39	-0.03	0.73	8.16
181	94.00	32.28407215	-103.84495088	25.31	31.84	-0.06	0.55	6.52
182	94.53	32.28407070	-103.84494402	24.84	31.60	-0.06	0.50	6.76
183	95.05	32.28407008	-103.84493694	21.99	26.06	-0.06	0.44	4.06
184	95.57	32.28406959	-103.84492987	22.81	24.41	-0.06	0.44	1.60
185	96.09	32.28406963	-103.84492289	22.31	27.23	-0.06	0.38	4.92
186	96.61	32.28406971	-103.84491597	24.45	28.91	-0.07	0.34	4.45
187	97.14	32.28406990	-103.84490919	23.83	29.18	-0.05	0.29	5.35
188	97.66	32.28407033	-103.84490229	27.89	35.90	-0.07	0.31	8.01
189	98.18	32.28407115	-103.84489520	20.51	23.40	-0.08	0.26	2.89
190	98.70	32.28407233	-103.84488850	22.11	10.27	-0.08	0.25	-11.84
191	99.23	32.28407395	-103.84488222	25.59	24.14	-0.10	0.22	-1.45
192	99.75	32.28407621	-103.84487604	23.44	29.14	-0.09	0.19	5.70
193	100.27	32.28407902	-103.84486993	21.84	25.55	-0.09	0.16	3.71
194	100.79	32.28408259	-103.84486459	21.52	25.78	-0.08	0.19	4.26
195	101.31	32.28408662	-103.84485971	21.72	21.52	-0.07	0.23	-0.20
196	101.83	32.28409090	-103.84485554	21.52	21.95	-0.10	0.14	0.43
197	102.36	32.28409530	-103.84485164	22.38	22.23	-0.08	0.24	-0.16
198	102.88	32.28409898	-103.84484863	20.90	18.59	-0.08	0.24	-2.30
199	103.40	32.28410250	-103.84484582	21.13	21.56	-0.09	0.20	0.43
200	103.92	32.28410266	-103.84484527	20.66	20.78	-0.09	0.22	0.12
201	104.44	32.28410242	-103.84484500	20.63	20.39	-0.10	0.17	-0.23
202	104.97	32.28410315	-103.84484467	20.31	19.69	-0.08	0.18	-0.63
203	105.49	32.28410389	-103.84484437	21.09	21.99	-0.09	0.17	0.90
204	106.01	32.28410413	-103.84484455	20.43	21.48	-0.09	0.16	1.05
205	106.53	32.28410441	-103.84484474	21.09	21.95	-0.08	0.17	0.86
206	107.06	32.28410488	-103.84484496	21.13	20.78	-0.08	0.15	-0.35
207	107.58	32.28410590	-103.84484534	21.48	21.68	-0.07	0.23	0.20
208	108.10	32.28410870	-103.84484626	21.45	19.30	-0.08	0.11	-2.15
209	108.62	32.28411221	-103.84484690	21.56	22.23	-0.06	0.20	0.66
210	109.15	32.28411726	-103.84484695	21.29	21.29	-0.06	0.17	0.00
211	109.67	32.28412265	-103.84484692	21.17	22.89	-0.07	0.17	1.72
212	110.19	32.28412855	-103.84484676	20.16	22.34	-0.08	0.13	2.19
213	110.71	32.28413447	-103.84484734	19.88	20.66	-0.06	0.18	0.78
214	111.24	32.28414044	-103.84484870	20.59	21.37	-0.07	0.16	0.78
215	111.76	32.28414619	-103.84485097	19.81	20.74	-0.08	0.16	0.94
216	112.28	32.28415181	-103.84485392	20.66	21.48	-0.07	0.19	0.82
217	112.80	32.28415633	-103.84485841	20.12	19.88	-0.08	0.17	-0.23
218	113.32	32.28416033	-103.84486374	19.77	20.16	-0.07	0.18	0.39
219	113.85	32.28416304	-103.84486977	20.63	21.29	-0.07	0.19	0.66
220	114.37	32.28416530	-103.84487607	18.01	19.34	-0.09	0.16	1.33
221	114.89	32.28416634	-103.84488308	18.91	19.38	-0.07	0.18	0.47
222	115.41	32.28416712	-103.84489019	19.38	21.29	-0.08	0.17	1.91
223	115.92	32.28416712	-103.84489737	19.45	20.23	-0.06	0.21	0.78
224	116.43	32.28416704	-103.84490459	22.97	18.83	-0.07	0.23	-4.14
225	116.96	32.28416634	-103.84491236	24.10	23.40	-0.05	0.23	-0.70
226	117.50	32.28416559	-103.84492015	25.70	29.30	-0.06	0.27	3.59
227	118.02	32.28416470	-103.84492753	24.65	27.50	-0.06	0.26	2.85
228	118.55	32.28416375	-103.84493485	22.58	24.22	-0.06	0.27	1.64
229	119.07	32.28416258	-103.84494173	21.84	25.35	-0.07	0.27	3.52
230	119.59	32.28416121	-103.84494843	21.91	25.90	-0.07	0.26	3.98
231	120.11	32.28415923	-103.84495461	20.55	23.71	-0.08	0.26	3.16

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
232	120.64	32.28415680	-103.84496047	22.50	26.91	-0.07	0.29	4.41
233	121.16	32.28415349	-103.84496570	22.62	25.35	-0.09	0.24	2.74
234	121.68	32.28414965	-103.84497022	25.08	25.47	-0.08	0.28	0.39
235	122.20	32.28414507	-103.84497379	24.92	29.77	-0.07	0.26	4.84
236	122.72	32.28414003	-103.84497648	26.02	33.95	-0.08	0.28	7.93
237	123.25	32.28413453	-103.84497830	28.01	35.12	-0.06	0.30	7.11
238	123.77	32.28412919	-103.84497985	28.24	34.34	-0.06	0.32	6.09
239	124.29	32.28412394	-103.84498121	32.03	35.31	-0.05	0.34	3.28
240	124.81	32.28411900	-103.84498158	34.26	39.81	-0.05	0.42	5.55
241	125.34	32.28411419	-103.84498148	32.03	38.28	-0.05	0.49	6.25
242	125.86	32.28411171	-103.84498084	30.43	37.70	0.02	0.57	7.27
243	126.38	32.28410995	-103.84498003	30.31	36.29	0.09	0.64	5.98
244	126.90	32.28410987	-103.84498015	30.12	36.02	0.10	0.72	5.90
245	127.42	32.28411010	-103.84498044	30.74	35.82	0.09	0.75	5.08
246	127.95	32.28410968	-103.84498041	29.84	36.76	0.09	0.80	6.91
247	128.47	32.28410923	-103.84498036	31.17	39.73	0.07	0.75	8.56
248	128.99	32.28410894	-103.84498020	31.72	38.67	0.09	0.76	6.95
249	129.51	32.28410867	-103.84498007	31.99	39.34	0.09	0.79	7.34
250	130.04	32.28410845	-103.84498023	31.45	39.30	0.09	0.83	7.85
251	130.56	32.28410816	-103.84498033	32.03	39.96	0.08	0.82	7.93
252	131.08	32.28410753	-103.84498019	32.23	40.12	0.08	0.81	7.89
253	131.60	32.28410711	-103.84498022	31.88	39.92	0.08	0.86	8.05
254	132.12	32.28410725	-103.84498070	31.60	39.38	0.07	0.81	7.77
255	132.65	32.28410648	-103.84498080	31.72	38.91	0.08	0.81	7.19
256	133.17	32.28410409	-103.84498024	32.27	38.79	0.07	0.80	6.52
257	133.69	32.28410062	-103.84497987	30.82	40.90	0.04	0.79	10.08
258	134.21	32.28409574	-103.84497976	30.74	44.18	0.05	0.99	13.44
259	134.74	32.28409075	-103.84497815	31.95	43.98	0.05	0.96	12.03
260	135.26	32.28408567	-103.84497523	27.31	23.56	0.03	0.05	-3.75
261	135.78	32.28408174	-103.84497074	28.79	30.08	0.03	0.53	1.29
262	136.30	32.28407855	-103.84496526	29.06	36.09	0.01	0.88	7.03
263	136.82	32.28407643	-103.84495895	26.56	34.26	-0.01	0.80	7.70
264	137.35	32.28407478	-103.84495225	24.06	31.72	-0.03	0.66	7.66
265	137.87	32.28407360	-103.84494526	23.91	30.20	-0.04	0.56	6.29
266	138.39	32.28407255	-103.84493814	23.09	27.89	-0.06	0.40	4.81
267	138.91	32.28407184	-103.84493095	23.48	27.54	-0.04	0.41	4.06
268	139.44	32.28407118	-103.84492373	23.01	28.59	-0.05	0.33	5.59
269	139.96	32.28407014	-103.84491691	22.03	26.76	-0.05	0.34	4.73
270	140.48	32.28406906	-103.84491009	23.32	28.91	-0.05	0.32	5.59
271	141.00	32.28406769	-103.84490374	24.73	32.42	-0.07	0.23	7.70
272	141.52	32.28406617	-103.84489740	25.98	34.61	-0.05	0.27	8.63
273	142.05	32.28406356	-103.84489130	21.48	28.63	-0.07	0.22	7.15
274	142.57	32.28406078	-103.84488543	17.89	16.99	-0.05	0.20	-0.90
275	143.09	32.28405732	-103.84488046	20.47	19.06	-0.05	0.19	-1.41
276	143.61	32.28405356	-103.84487563	20.51	26.17	0.02	0.22	5.66
277	144.14	32.28404911	-103.84487115	20.43	27.85	-0.01	0.24	7.42
278	144.66	32.28404436	-103.84486718	23.67	28.75	-0.06	0.24	5.08
279	145.18	32.28403913	-103.84486403	24.65	31.41	-0.02	0.28	6.76
280	145.70	32.28403374	-103.84486128	20.20	25.94	-0.06	0.26	5.74
281	146.22	32.28402815	-103.84485901	15.16	14.49	-0.06	0.17	-0.66
282	146.75	32.28402251	-103.84485686	15.27	11.17	-0.06	0.14	-4.10
283	147.27	32.28401681	-103.84485481	17.97	10.47	-0.04	0.23	-7.50
284	147.79	32.28401139	-103.84485197	-8.24	18.28	0.33	0.35	26.52
285	148.31	32.28400611	-103.84484866	19.18	24.30	0.02	0.36	5.12
286	148.83	32.28400127	-103.84484522	23.91	21.41	-0.01	0.23	-2.50
287	149.36	32.28399660	-103.84484173	19.88	16.48	-0.05	0.11	-3.40
288	149.88	32.28399167	-103.84483879	16.45	10.43	-0.05	0.13	-6.02
289	150.40	32.28398673	-103.84483601	20.90	15.63	-0.06	0.12	-5.27
290	150.92	32.28398131	-103.84483367	9.34	20.90	-0.05	0.14	11.56
291	151.44	32.28397579	-103.84483138	22.07	25.31	-0.04	0.13	3.24
292	151.96	32.28397073	-103.84482878	26.88	28.09	-0.04	0.13	1.21
293	152.49	32.28396567	-103.84482616	23.48	25.78	-0.02	0.09	2.30
294	153.01	32.28396081	-103.84482361	22.70	21.84	-0.03	0.10	-0.86
295	153.54	32.28395600	-103.84482095	26.29	25.39	0.01	0.29	-0.90
296	154.05	32.28395158	-103.84481779	24.73	23.71	0.04	0.27	-1.02
297	154.58	32.28394712	-103.84481445	16.88	7.15	0.13	0.45	-9.73
298	155.10	32.28394254	-103.84481054	19.06	6.25	0.08	-0.10	-12.81
299	155.62	32.28393845	-103.84480601	20.63	-6.17	0.09	-1.12	-26.80
300	156.15	32.28393541	-103.84480010	24.30	18.52	0.22	0.35	-5.78
301	156.67	32.28393302	-103.84479389	9.69	-0.31	0.37	1.31	-10.00
302	157.19	32.28393161	-103.84478723	7.03	-16.60	0.33	1.24	-23.63
303	157.71	32.28393074	-103.84478075	10.90	-16.41	0.27	1.32	-27.30
304	158.24	32.28393044	-103.84477447	14.34	-2.85	0.27	1.29	-17.19
305	158.76	32.28393067	-103.84476809	12.42	0.08	0.36	1.49	-12.34
306	159.28	32.28393128	-103.84476162	14.38	0.51	0.28	1.41	-13.87
307	159.80	32.28393223	-103.84475533	14.10	2.89	0.26	1.56	-11.21
308	160.32	32.28393336	-103.84474913	18.75	4.77	0.22	1.57	-13.98

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
309	160.84	32.28393426	-103.84474258	16.52	7.23	0.29	1.68	-9.30
310	161.37	32.28393507	-103.84473585	13.63	5.98	0.22	1.57	-7.66
311	161.89	32.28393570	-103.84472913	16.45	5.86	0.21	1.54	-10.59
312	162.41	32.28393628	-103.84472238	16.25	7.15	0.23	1.39	-9.10
313	162.92	32.28393694	-103.84471614	15.55	7.66	0.20	1.43	-7.89
314	163.43	32.28393760	-103.84470992	20.31	13.32	0.26	1.85	-6.99
315	163.96	32.28393809	-103.84470361	20.90	13.09	0.24	1.89	-7.81
316	164.50	32.28393858	-103.84469733	21.68	15.98	0.24	2.10	-5.70
317	165.02	32.28393920	-103.84469167	20.16	17.34	0.28	2.31	-2.81
318	165.54	32.28394010	-103.84468618	26.06	23.87	0.34	2.66	-2.19
319	166.07	32.28394245	-103.84468174	24.73	21.06	0.39	2.98	-3.67
320	166.59	32.28394521	-103.84467749	28.59	23.87	0.40	3.06	-4.73
321	167.11	32.28394921	-103.84467379	20.70	13.40	0.17	1.08	-7.31
322	167.64	32.28395339	-103.84467042	21.21	1.21	0.05	-0.26	-20.00
323	168.16	32.28395785	-103.84466771	19.41	-1.76	0.02	-0.08	-21.17
324	168.68	32.28396208	-103.84466690	20.82	7.54	0.02	0.13	-13.28
325	169.20	32.28396596	-103.84466871	21.25	4.22	-0.03	-0.07	-17.03
326	169.72	32.28396912	-103.84467218	19.06	-0.63	-0.04	-0.14	-19.69
327	170.25	32.28397158	-103.84467724	17.46	2.50	-0.04	-0.04	-14.96
328	170.77	32.28397289	-103.84468298	17.97	6.80	-0.03	0.01	-11.17
329	171.29	32.28397340	-103.84468917	14.81	4.65	-0.03	0.02	-10.16
330	171.81	32.28397298	-103.84469505	16.33	6.56	-0.03	0.01	-9.77
331	172.33	32.28397212	-103.84470079	17.46	5.39	-0.05	-0.08	-12.07
332	172.86	32.28397118	-103.84470695	13.16	2.50	-0.02	0.08	-10.66
333	173.38	32.28397022	-103.84471326	15.63	7.31	-0.03	0.03	-8.32
334	173.90	32.28396929	-103.84471954	16.17	5.23	0.01	0.03	-10.94
335	174.42	32.28396835	-103.84472585	14.41	3.79	0.02	0.14	-10.63
336	174.95	32.28396733	-103.84473210	15.98	6.29	0.01	0.18	-9.69
337	175.47	32.28396630	-103.84473834	16.52	8.32	0.01	0.14	-8.20
338	175.99	32.28396529	-103.84474458	14.61	5.59	0.02	0.08	-9.02
339	176.51	32.28396422	-103.84475076	13.75	5.90	-0.01	0.14	-7.85
340	177.03	32.28396273	-103.84475612	13.40	1.72	0.00	0.05	-11.68
341	177.56	32.28396112	-103.84476156	17.15	7.77	0.03	0.26	-9.38
342	178.08	32.28395920	-103.84476684	15.74	6.76	0.02	0.16	-8.98
343	178.60	32.28395741	-103.84477247	19.06	5.94	0.04	0.13	-13.13
344	179.12	32.28395603	-103.84477881	16.72	4.53	0.04	0.16	-12.19
345	179.65	32.28395495	-103.84478499	15.12	1.68	0.00	0.09	-13.44
346	180.17	32.28395444	-103.84479083	14.88	-4.10	0.05	0.13	-18.99
347	180.69	32.28395394	-103.84479700	23.24	9.88	0.04	0.05	-13.36
348	181.21	32.28395345	-103.84480358	13.95	-2.19	0.11	0.11	-16.13
349	181.74	32.28395283	-103.84480981	13.05	-17.03	0.17	0.17	-30.08
350	182.26	32.28395210	-103.84481565	14.41	-10.47	0.04	0.05	-24.88
351	182.78	32.28395140	-103.84482155	14.57	-4.57	0.09	-0.04	-19.14
352	183.30	32.28395073	-103.84482748	17.42	1.64	0.05	-0.13	-15.78
353	183.82	32.28395036	-103.84483373	9.26	-4.30	0.14	0.02	-13.56
354	184.35	32.28395013	-103.84484015	15.55	1.29	0.07	0.01	-14.26
355	184.87	32.28395040	-103.84484607	12.97	-0.74	0.05	0.19	-13.71
356	185.39	32.28395081	-103.84485187	17.46	1.84	0.02	-0.07	-15.63
357	185.91	32.28395063	-103.84485816	16.02	3.36	0.02	-0.05	-12.66
358	186.44	32.28395035	-103.84486457	14.18	0.51	0.04	0.06	-13.67
359	186.96	32.28394986	-103.84487052	18.32	3.91	0.02	-0.08	-14.41
360	187.48	32.28394936	-103.84487645	13.56	-2.58	-0.01	-0.04	-16.13
361	188.00	32.28394877	-103.84488206	14.69	-1.06	0.05	-0.01	-15.74
362	188.52	32.28394821	-103.84488775	17.54	2.31	0.01	0.02	-15.23
363	189.05	32.28394785	-103.84489381	15.74	-0.04	0.01	-0.11	-15.78
364	189.57	32.28394756	-103.84489983	19.34	1.99	0.02	-0.04	-17.34
365	190.09	32.28394750	-103.84490558	15.20	-3.05	0.03	-0.21	-18.24
366	190.61	32.28394749	-103.84491144	16.33	-0.27	0.04	-0.07	-16.60
367	191.13	32.28394759	-103.84491753	13.59	-5.27	-0.01	-0.25	-18.87
368	191.66	32.28394756	-103.84492316	6.80	-14.57	0.02	-0.34	-21.37
369	192.18	32.28394733	-103.84492802	12.70	-8.09	0.03	-0.38	-20.78
370	192.70	32.28394818	-103.84493271	17.15	-8.98	0.01	-0.50	-26.13
371	193.22	32.28395031	-103.84493720	12.58	-11.91	-0.02	-0.52	-24.49
372	193.74	32.28395334	-103.84494046	18.59	-2.19	-0.03	-0.57	-20.78
373	194.27	32.28395716	-103.84494276	17.93	-1.72	-0.03	-0.61	-19.65
374	194.79	32.28396094	-103.84494437	17.73	1.88	-0.02	-0.28	-15.86
375	195.31	32.28396471	-103.84494559	17.46	7.23	-0.03	-0.29	-10.23
376	195.83	32.28396842	-103.84494582	18.16	6.68	-0.02	-0.19	-11.48
377	196.36	32.28397211	-103.84494566	14.30	7.31	-0.03	-0.02	-6.99
378	196.88	32.28397407	-103.84494232	13.36	8.83	0.02	-0.04	-4.53
379	197.40	32.28397561	-103.84493821	14.22	8.83	0.03	0.00	-5.39
380	197.92	32.28397605	-103.84493307	13.40	10.16	-0.01	0.10	-3.24
381	198.44	32.28397634	-103.84492780	16.13	12.31	-0.02	0.14	-3.83
382	198.97	32.28397675	-103.84492211	14.57	11.95	-0.02	0.14	-2.62
383	199.49	32.28397716	-103.84491636	15.63	13.95	-0.01	0.17	-1.68
384	200.01	32.28397761	-103.84491006	14.88	12.19	-0.03	0.15	-2.70
385	200.53	32.28397801	-103.84490371	15.23	12.27	-0.03	0.13	-2.97

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
386	201.06	32.28397817	-103.84489715	14.26	11.88	0.02	0.20	-2.38
387	201.58	32.28397827	-103.84489066	16.56	14.73	0.00	0.09	-1.84
388	202.10	32.28397818	-103.84488433	14.53	11.52	0.02	0.15	-3.01
389	202.62	32.28397805	-103.84487804	13.95	11.56	0.04	0.20	-2.38
390	203.14	32.28397781	-103.84487182	16.17	15.31	-0.02	0.12	-0.86
391	203.67	32.28397781	-103.84486566	13.67	10.20	-0.04	0.21	-3.48
392	204.19	32.28397817	-103.84485966	17.89	17.23	-0.06	0.12	-0.66
393	204.71	32.28397839	-103.84485381	20.86	18.24	-0.03	0.18	-2.62
394	205.23	32.28397849	-103.84484815	7.66	22.58	-0.04	0.19	14.92
395	205.76	32.28397833	-103.84484212	26.02	20.31	0.00	0.27	-5.70
396	206.28	32.28397797	-103.84483582	26.72	26.21	-0.01	0.16	-0.51
397	206.80	32.28397798	-103.84482955	15.00	4.65	0.05	0.15	-10.35
398	207.32	32.28397819	-103.84482330	20.59	3.16	0.08	0.15	-17.42
399	207.84	32.28397841	-103.84481725	21.76	20.66	0.00	0.28	-1.09
400	208.37	32.28397863	-103.84481126	23.09	27.23	-0.01	0.22	4.14
401	208.89	32.28397911	-103.84480581	20.55	24.53	0.01	0.26	3.98
402	209.41	32.28397965	-103.84480048	16.33	19.26	-0.02	0.15	2.93
403	209.93	32.28398019	-103.84479460	15.66	14.38	-0.02	0.09	-1.29
404	210.46	32.28398074	-103.84478861	16.02	16.45	-0.02	0.14	0.43
405	210.98	32.28398105	-103.84478258	16.06	14.06	0.00	0.21	-1.99
406	211.50	32.28398135	-103.84477652	14.77	12.89	-0.02	0.18	-1.88
407	212.02	32.28398133	-103.84477084	14.84	8.91	-0.07	0.07	-5.94
408	212.55	32.28398145	-103.84476521	5.90	8.40	0.03	0.11	2.50
409	213.07	32.28398228	-103.84475992	10.98	8.52	-0.03	0.14	-2.46
410	213.59	32.28398307	-103.84475443	16.41	11.06	-0.02	0.11	-5.35
411	214.11	32.28398375	-103.84474834	16.95	13.32	-0.03	0.22	-3.63
412	214.64	32.28398429	-103.84474220	15.90	12.11	-0.03	0.22	-3.79
413	215.16	32.28398456	-103.84473597	15.31	13.91	-0.02	0.18	-1.41
414	215.68	32.28398465	-103.84473004	10.98	12.46	0.10	0.25	1.48
415	216.20	32.28398449	-103.84472449	10.90	10.78	0.19	0.34	-0.12
416	216.72	32.28398440	-103.84471897	13.24	9.77	0.06	0.27	-3.48
417	217.24	32.28398440	-103.84471348	17.38	13.75	-0.01	0.17	-3.63
418	217.77	32.28398453	-103.84470820	17.27	13.79	-0.03	0.10	-3.48
419	218.29	32.28398475	-103.84470307	20.08	17.62	-0.05	0.11	-2.46
420	218.81	32.28398500	-103.84469724	19.57	18.16	-0.03	0.08	-1.41
421	219.33	32.28398527	-103.84469104	19.81	14.61	-0.02	-0.04	-5.20
422	219.86	32.28398556	-103.84468532	17.11	14.81	-0.03	0.11	-2.30
423	220.38	32.28398586	-103.84467976	20.47	15.74	-0.02	0.17	-4.73
424	220.90	32.28398654	-103.84467436	21.25	15.31	-0.04	0.05	-5.94
425	221.42	32.28398728	-103.84466898	20.43	16.84	0.00	0.11	-3.59
426	221.95	32.28398826	-103.84466389	23.32	17.77	-0.03	0.04	-5.55
427	222.47	32.28398927	-103.84465879	26.72	25.63	-0.05	0.02	-1.09
428	222.99	32.28399034	-103.84465297	26.80	21.02	-0.01	0.00	-5.78
429	223.51	32.28399138	-103.84464721	31.64	26.68	-0.02	-0.10	-4.96
430	224.03	32.28399206	-103.84464207	51.91	46.48	-0.04	-0.12	-5.43
431	224.56	32.28399291	-103.84463698	53.40	44.02	-0.02	-0.03	-9.38
432	225.08	32.28399445	-103.84463229	89.22	23.13	0.00	0.08	-66.09
433	225.60	32.28399595	-103.84462764	163.24	10.90	-0.01	0.01	-152.34
434	226.12	32.28399732	-103.84462321	223.95	47.27	0.02	-0.07	-176.68
435	226.65	32.28399811	-103.84461890	224.53	68.48	-0.03	-0.29	-156.05
436	227.17	32.28399786	-103.84461504	248.71	69.26	-0.03	-0.38	-179.45
437	227.69	32.28399813	-103.84461136	259.65	62.23	0.00	-0.27	-197.42
438	228.21	32.28399905	-103.84460796	249.69	68.13	0.00	-0.23	-181.56
439	228.73	32.28400007	-103.84460479	226.45	66.56	-0.02	-0.56	-159.88
440	229.26	32.28400120	-103.84460177	232.73	83.98	-0.02	-0.60	-148.75
441	229.78	32.28400362	-103.84459939	226.25	94.34	0.02	-0.54	-131.91
442	230.30	32.28400688	-103.84459740	219.34	91.88	-0.02	-0.64	-127.46
443	230.82	32.28400996	-103.84459608	237.81	110.35	-0.04	-0.61	-127.46
444	231.35	32.28401299	-103.84459504	203.91	121.88	0.01	-0.03	-82.03
445	231.87	32.28401599	-103.84459347	163.52	103.40	0.03	0.64	-60.12
446	232.39	32.28401897	-103.84459175	145.16	86.21	0.05	0.96	-58.95
447	232.91	32.28402239	-103.84459383	122.97	57.23	0.03	0.72	-65.74
448	233.43	32.28402589	-103.84459651	110.55	77.81	0.01	0.46	-32.73
449	233.96	32.28402865	-103.84460105	87.15	50.74	-0.03	-0.38	-36.41
450	234.48	32.28403130	-103.84460572	84.65	28.05	-0.02	-0.67	-56.60
451	235.00	32.28403220	-103.84461118	100.82	21.52	0.03	-0.53	-79.30
452	235.52	32.28403296	-103.84461663	143.05	17.81	0.00	-0.66	-125.23
453	236.04	32.28403263	-103.84462190	193.13	32.50	-0.04	-0.48	-160.63
454	236.57	32.28403224	-103.84462720	262.62	61.52	-0.05	-0.48	-201.09
455	237.09	32.28403160	-103.84463258	308.32	92.77	-0.03	-0.16	-215.55
456	237.61	32.28403095	-103.84463815	329.61	114.26	-0.04	-0.25	-215.35
457	238.13	32.28403026	-103.84464421	366.33	134.10	-0.07	-0.19	-232.23
458	238.66	32.28402970	-103.84465009	353.63	137.93	-0.06	-0.10	-215.70
459	239.18	32.28402934	-103.84465564	285.70	95.04	-0.02	-0.04	-190.66
460	239.70	32.28402884	-103.84466118	183.67	38.24	-0.06	-0.12	-145.43
461	240.22	32.28402816	-103.84466669	112.85	27.50	-0.04	0.02	-85.35
462	240.75	32.28402747	-103.84467228	88.79	66.17	-0.03	-0.07	-22.62

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
463	241.27	32.28402676	-103.84467797	79.84	61.68	-0.07	-0.10	-18.16
464	241.79	32.28402639	-103.84468411	77.27	38.91	0.05	0.13	-38.36
465	242.31	32.28402621	-103.84469059	64.26	19.69	0.01	0.14	-44.57
466	242.83	32.28402612	-103.84469693	40.31	14.96	-0.03	0.14	-25.35
467	243.36	32.28402606	-103.84470325	35.94	27.58	-0.02	0.16	-8.36
468	243.88	32.28402556	-103.84470943	27.07	31.41	-0.04	0.06	4.34
469	244.40	32.28402496	-103.84471559	22.19	25.94	-0.03	0.21	3.75
470	244.92	32.28402427	-103.84472138	17.70	18.75	-0.04	0.11	1.06
471	245.44	32.28402357	-103.84472712	18.13	17.77	-0.03	0.07	-0.35
472	245.96	32.28402282	-103.84473314	19.49	18.32	-0.03	0.06	-1.17
473	246.49	32.28402209	-103.84473924	19.57	21.29	-0.06	0.10	1.72
474	247.01	32.28402176	-103.84474540	18.63	16.09	-0.06	0.10	-2.54
475	247.53	32.28402145	-103.84475159	21.52	19.88	-0.06	0.09	-1.64
476	248.06	32.28402121	-103.84475759	22.42	25.51	-0.02	0.12	3.09
477	248.58	32.28402093	-103.84476367	18.48	14.22	-0.04	0.12	-4.26
478	249.10	32.28402052	-103.84476988	17.89	8.48	-0.06	0.17	-9.41
479	249.62	32.28402001	-103.84477613	16.13	13.32	-0.04	0.14	-2.81
480	250.15	32.28401926	-103.84478234	13.01	12.77	-0.03	0.14	-0.23
481	250.67	32.28401850	-103.84478845	14.26	14.02	-0.02	0.19	-0.23
482	251.19	32.28401770	-103.84479439	15.35	13.79	-0.04	0.11	-1.56
483	251.71	32.28401699	-103.84480049	14.61	13.28	-0.02	0.26	-1.33
484	252.23	32.28401639	-103.84480675	16.56	17.77	-0.03	0.17	1.21
485	252.75	32.28401573	-103.84481292	14.61	15.04	-0.04	0.14	0.43
486	253.28	32.28401501	-103.84481909	16.33	17.11	-0.05	0.15	0.78
487	253.80	32.28401427	-103.84482524	17.11	17.97	-0.04	0.14	0.86
488	254.32	32.28401350	-103.84483141	21.88	22.73	-0.02	0.16	0.86
489	254.84	32.28401252	-103.84483777	27.62	31.80	-0.03	0.21	4.18
490	255.37	32.28401147	-103.84484422	18.79	22.66	0.00	0.23	3.87
491	255.89	32.28401060	-103.84485023	8.13	-3.75	0.18	0.21	-11.88
492	256.41	32.28400975	-103.84485617	24.26	16.25	-0.03	0.22	-8.01
493	256.92	32.28400912	-103.84486232	23.63	32.93	-0.05	0.13	9.30
494	257.43	32.28400852	-103.84486849	21.45	27.62	-0.05	0.12	6.17
495	257.96	32.28400763	-103.84487495	17.38	22.23	-0.02	0.22	4.84
496	258.50	32.28400674	-103.84488144	18.28	22.34	-0.05	0.08	4.06
497	259.02	32.28400617	-103.84488742	15.39	17.73	-0.04	0.17	2.34
498	259.54	32.28400554	-103.84489340	15.31	16.84	0.00	0.21	1.52
499	260.07	32.28400468	-103.84489926	16.41	16.06	-0.03	0.17	-0.35
500	260.59	32.28400384	-103.84490520	15.70	17.73	-0.03	0.11	2.03
501	261.11	32.28400307	-103.84491139	15.86	16.88	-0.02	0.19	1.02
502	261.63	32.28400223	-103.84491754	15.31	18.13	0.02	0.23	2.81
503	262.16	32.28400126	-103.84492362	15.20	15.16	0.01	0.28	-0.04
504	262.68	32.28400050	-103.84492939	14.34	13.56	-0.04	0.18	-0.78
505	263.20	32.28400005	-103.84493475	13.91	15.12	0.08	0.19	1.21
506	263.72	32.28400061	-103.84493929	13.95	14.26	0.04	0.22	0.31
507	264.25	32.28400217	-103.84494301	12.89	13.05	0.15	0.26	0.16
508	264.77	32.28400437	-103.84494572	15.47	16.95	0.12	0.20	1.48
509	265.29	32.28400704	-103.84494773	17.11	17.38	-0.03	0.17	0.27
510	265.81	32.28401018	-103.84494909	17.85	17.19	-0.05	0.09	-0.66
511	266.33	32.28401355	-103.84495015	13.16	13.83	-0.01	0.10	0.66
512	266.85	32.28401637	-103.84494899	16.25	14.92	-0.05	0.17	-1.33
513	267.38	32.28401903	-103.84494712	17.89	18.87	-0.05	0.22	0.98
514	267.90	32.28402076	-103.84494284	16.64	17.42	-0.02	0.20	0.78
515	268.42	32.28402232	-103.84493811	15.43	15.78	-0.03	0.26	0.35
516	268.94	32.28402254	-103.84493294	16.99	18.95	-0.03	0.22	1.95
517	269.47	32.28402265	-103.84492772	16.25	15.55	-0.06	0.20	-0.70
518	269.99	32.28402260	-103.84492148	16.06	17.11	-0.05	0.15	1.05
519	270.51	32.28402252	-103.84491530	17.07	16.48	-0.04	0.16	-0.59
520	271.03	32.28402211	-103.84490966	16.37	17.58	-0.05	0.19	1.21
521	271.56	32.28402181	-103.84490401	17.62	18.87	-0.05	0.17	1.25
522	272.08	32.28402200	-103.84489851	17.50	17.73	-0.04	0.25	0.23
523	272.60	32.28402237	-103.84489300	17.81	18.83	-0.04	0.18	1.02
524	273.12	32.28402323	-103.84488759	17.23	18.28	-0.03	0.24	1.05
525	273.65	32.28402405	-103.84488180	20.74	23.56	-0.05	0.23	2.81
526	274.17	32.28402477	-103.84487560	23.63	27.77	-0.05	0.22	4.14
527	274.69	32.28402536	-103.84486939	26.09	32.54	-0.07	0.08	6.45
528	275.21	32.28402578	-103.84486325	15.47	12.31	-0.05	0.11	-3.16
529	275.73	32.28402633	-103.84485738	18.79	-3.56	-0.04	0.15	-22.34
530	276.26	32.28402703	-103.84485169	27.11	26.02	-0.04	0.14	-1.09
531	276.78	32.28402782	-103.84484620	24.41	30.59	-0.05	0.15	6.17
532	277.30	32.28402866	-103.84484078	21.48	28.67	-0.07	0.19	7.19
533	277.82	32.28402931	-103.84483538	20.08	25.59	-0.05	0.17	5.51
534	278.35	32.28402987	-103.84482997	18.75	23.01	-0.05	0.19	4.26
535	278.87	32.28403017	-103.84482462	15.78	18.95	-0.07	0.15	3.16
536	279.39	32.28403039	-103.84481926	15.90	17.19	-0.04	0.17	1.29
537	279.91	32.28403060	-103.84481376	13.71	16.64	-0.05	0.18	2.93
538	280.43	32.28403080	-103.84480823	13.75	14.77	-0.05	0.13	1.02
539	280.96	32.28403153	-103.84480296	16.68	19.61	-0.03	0.20	2.93

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
540	281.48	32.28403228	-103.84479767	13.13	13.20	-0.05	0.20	0.08
541	282.00	32.28403285	-103.84479158	14.38	13.40	-0.02	0.31	-0.98
542	282.52	32.28403338	-103.84478556	13.98	13.36	-0.04	0.20	-0.63
543	283.04	32.28403360	-103.84478000	14.22	14.88	-0.03	0.22	0.66
544	283.57	32.28403389	-103.84477431	14.10	13.67	-0.04	0.20	-0.43
545	284.09	32.28403439	-103.84476858	15.31	15.39	-0.04	0.21	0.08
546	284.61	32.28403499	-103.84476293	16.09	15.51	-0.03	0.16	-0.59
547	285.13	32.28403578	-103.84475760	15.86	16.41	-0.04	0.10	0.55
548	285.66	32.28403631	-103.84475223	14.81	13.44	-0.04	0.14	-1.37
549	286.18	32.28403640	-103.84474680	17.66	16.13	-0.04	0.27	-1.52
550	286.70	32.28403624	-103.84474189	19.10	18.44	-0.05	0.24	-0.66
551	287.22	32.28403578	-103.84473762	20.51	22.89	-0.06	0.12	2.38
552	287.74	32.28403580	-103.84473314	21.91	22.77	-0.06	0.08	0.86
553	288.27	32.28403622	-103.84472848	25.12	28.44	-0.05	0.18	3.32
554	288.79	32.28403690	-103.84472378	27.89	28.95	-0.04	0.13	1.05
555	289.31	32.28403773	-103.84471905	33.36	20.78	-0.05	0.13	-12.58
556	289.83	32.28403810	-103.84471435	45.04	10.04	-0.04	0.24	-35.00
557	290.35	32.28403831	-103.84470964	53.44	19.53	-0.03	0.20	-33.91
558	290.88	32.28403888	-103.84470511	54.30	33.09	-0.05	0.15	-21.21
559	291.40	32.28403955	-103.84470063	58.32	37.85	-0.07	0.11	-20.47
560	291.92	32.28404014	-103.84469556	58.28	33.63	-0.04	0.14	-24.65
561	292.44	32.28404071	-103.84469039	53.36	27.93	-0.06	0.08	-25.43
562	292.97	32.28404111	-103.84468487	50.78	35.98	-0.06	0.04	-14.80
563	293.49	32.28404149	-103.84467936	51.33	59.49	-0.05	0.07	8.16
564	294.01	32.28404169	-103.84467393	90.31	16.37	-0.05	0.08	-73.95
565	294.53	32.28404191	-103.84466859	243.71	6.37	-0.06	0.04	-237.34
566	295.06	32.28404217	-103.84466374	279.22	84.45	-0.01	0.16	-194.77
567	295.58	32.28404245	-103.84465894	323.83	104.92	-0.01	0.11	-218.91
568	296.10	32.28404274	-103.84465434	351.80	138.28	0.00	0.25	-213.52
569	296.62	32.28404296	-103.84464972	352.89	156.72	-0.03	0.17	-196.17
570	297.14	32.28404303	-103.84464500	355.16	151.21	0.06	0.07	-203.95
571	297.67	32.28404336	-103.84464013	333.56	126.99	0.01	0.05	-206.56
572	298.19	32.28404407	-103.84463530	286.17	118.91	0.01	0.18	-167.27
573	298.71	32.28404481	-103.84463041	247.81	99.14	0.01	0.00	-148.67
574	299.23	32.28404558	-103.84462556	183.20	54.69	0.02	0.02	-128.52
575	299.75	32.28404592	-103.84462091	99.06	15.78	-0.02	-0.22	-83.28
576	300.28	32.28404593	-103.84461639	74.81	11.45	0.06	-0.02	-63.36
577	300.81	32.28404595	-103.84461217	59.96	30.94	0.04	-0.33	-29.02
578	301.32	32.28404597	-103.84460822	42.46	15.66	0.00	-0.29	-26.80
579	301.84	32.28404735	-103.84460491	42.89	6.64	-0.03	-0.52	-36.25
580	302.37	32.28404923	-103.84460185	44.26	4.45	-0.06	-0.63	-39.81
581	302.89	32.28405260	-103.84460008	41.06	8.09	-0.07	-0.65	-32.97
582	303.41	32.28405631	-103.84459857	42.50	7.15	0.01	-0.40	-35.35
583	303.92	32.28405962	-103.84459854	45.39	29.45	0.06	0.26	-15.94
584	304.43	32.28406290	-103.84459866	47.27	49.38	0.03	0.44	2.11
585	304.96	32.28406637	-103.84460117	45.23	51.84	0.02	0.42	6.60
586	305.50	32.28406974	-103.84460402	39.92	40.35	0.40	0.38	0.43
587	306.02	32.28407182	-103.84460895	40.78	25.35	0.17	-0.09	-15.43
588	306.54	32.28407360	-103.84461397	35.23	10.00	0.02	-0.37	-25.23
589	307.07	32.28407381	-103.84461942	37.62	11.25	-0.02	-0.45	-26.37
590	307.59	32.28407380	-103.84462460	62.81	34.02	0.01	-0.44	-28.79
591	308.11	32.28407312	-103.84462895	64.84	26.95	0.00	-0.50	-37.89
592	308.63	32.28407257	-103.84463348	150.86	-14.53	-0.04	-0.49	-165.39
593	309.15	32.28407226	-103.84463832	243.40	4.81	0.09	-0.47	-238.59
594	309.68	32.28407201	-103.84464318	303.24	69.38	0.10	-0.18	-233.87
595	310.20	32.28407183	-103.84464807	338.87	119.30	-0.02	-0.10	-219.57
596	310.72	32.28407131	-103.84465274	358.75	148.52	-0.05	-0.08	-210.23
597	311.24	32.28407045	-103.84465720	369.38	166.91	-0.05	-0.01	-202.46
598	311.76	32.28406978	-103.84466203	373.56	168.40	-0.02	0.15	-205.16
599	312.29	32.28406923	-103.84466712	365.04	161.48	-0.04	0.04	-203.56
600	312.81	32.28406885	-103.84467216	327.77	155.00	-0.06	0.08	-172.77
601	313.33	32.28406855	-103.84467718	300.86	125.94	-0.05	-0.03	-174.92
602	313.85	32.28406813	-103.84468246	263.05	94.26	-0.12	-0.02	-168.79
603	314.38	32.28406766	-103.84468784	221.84	94.22	-0.21	0.01	-127.62
604	314.90	32.28406708	-103.84469346	210.98	73.79	-0.08	0.00	-137.19
605	315.42	32.28406646	-103.84469917	207.77	59.92	-0.05	0.12	-147.85
606	315.94	32.28406622	-103.84470499	187.66	47.62	-0.04	0.09	-140.04
607	316.47	32.28406599	-103.84471085	127.19	15.90	-0.06	0.13	-111.29
608	316.99	32.28406565	-103.84471670	53.36	-9.73	-0.05	0.16	-63.09
609	317.51	32.28406528	-103.84472257	32.07	7.34	-0.05	0.13	-24.73
610	318.03	32.28406472	-103.84472859	23.98	21.52	-0.07	0.05	-2.46
611	318.56	32.28406414	-103.84473461	20.59	21.25	-0.04	0.11	0.66
612	319.08	32.28406347	-103.84474032	18.20	16.76	-0.05	0.11	-1.45
613	319.60	32.28406285	-103.84474624	16.37	14.18	-0.03	0.15	-2.19
614	320.12	32.28406236	-103.84475257	17.07	15.23	-0.03	0.15	-1.84
615	320.64	32.28406199	-103.84475886	15.70	15.39	-0.05	0.17	-0.31
616	321.17	32.28406186	-103.84476504	16.37	16.13	-0.04	0.25	-0.23

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
617	321.69	32.28406156	-103.84477129	16.84	16.09	-0.06	0.10	-0.74
618	322.21	32.28406106	-103.84477766	14.53	12.54	-0.03	0.18	-1.99
619	322.73	32.28406047	-103.84478396	15.39	14.14	-0.05	0.17	-1.25
620	323.25	32.28405979	-103.84479022	15.90	16.09	-0.05	0.13	0.20
621	323.78	32.28405886	-103.84479630	14.18	12.62	-0.04	0.15	-1.56
622	324.30	32.28405777	-103.84480232	13.67	11.91	-0.06	0.16	-1.76
623	324.82	32.28405658	-103.84480844	16.68	16.68	-0.04	0.24	0.00
624	325.34	32.28405536	-103.84481454	15.12	13.20	-0.06	0.16	-1.91
625	325.86	32.28405443	-103.84482076	16.29	16.21	-0.05	0.16	-0.08
626	326.39	32.28405360	-103.84482703	15.86	16.45	-0.04	0.19	0.59
627	326.91	32.28405290	-103.84483337	14.45	12.77	-0.03	0.29	-1.68
628	327.43	32.28405222	-103.84483972	17.03	17.54	-0.04	0.19	0.51
629	327.95	32.28405138	-103.84484564	19.57	23.05	-0.06	0.21	3.48
630	328.48	32.28405051	-103.84485152	19.81	22.77	-0.05	0.22	2.97
631	329.00	32.28404924	-103.84485683	23.52	27.34	-0.06	0.17	3.83
632	329.52	32.28404802	-103.84486222	25.66	31.88	-0.02	0.21	6.21
633	330.04	32.28404709	-103.84486833	17.97	22.89	0.04	0.30	4.92
634	330.57	32.28404629	-103.84487465	19.34	3.67	-0.02	0.23	-15.66
635	331.09	32.28404603	-103.84488127	25.47	22.23	-0.04	0.19	-3.24
636	331.61	32.28404578	-103.84488783	23.24	28.71	-0.07	0.10	5.47
637	332.14	32.28404555	-103.84489423	19.81	27.46	-0.03	0.24	7.66
638	332.66	32.28404516	-103.84490060	18.87	24.88	0.00	0.25	6.02
639	333.18	32.28404452	-103.84490697	12.31	22.11	0.04	0.21	9.80
640	333.70	32.28404392	-103.84491321	13.32	20.82	0.09	0.27	7.50
641	334.22	32.28404339	-103.84491920	15.35	16.91	-0.02	0.21	1.56
642	334.74	32.28404276	-103.84492492	16.91	19.57	-0.04	0.22	2.66
643	335.26	32.28404204	-103.84493042	17.93	21.02	-0.04	0.24	3.09
644	335.79	32.28404175	-103.84493558	16.95	18.98	-0.03	0.30	2.03
645	336.31	32.28404172	-103.84494054	19.06	22.15	-0.03	0.21	3.09
646	336.83	32.28404321	-103.84494360	17.93	19.77	-0.06	0.24	1.84
647	337.35	32.28404531	-103.84494589	17.03	21.91	-0.01	0.26	4.88
648	337.88	32.28404839	-103.84494730	14.61	18.95	0.01	0.28	4.34
649	338.40	32.28405172	-103.84494848	17.89	20.43	-0.04	0.43	2.54
650	338.92	32.28405497	-103.84494918	20.66	25.20	-0.02	0.43	4.53
651	339.44	32.28405823	-103.84494982	20.12	23.63	-0.03	0.32	3.52
652	339.97	32.28405931	-103.84494711	20.43	24.61	-0.04	0.38	4.18
653	340.49	32.28406028	-103.84494415	21.02	25.35	-0.04	0.32	4.34
654	341.01	32.28406046	-103.84493878	20.23	25.51	-0.05	0.32	5.27
655	341.53	32.28406062	-103.84493336	20.31	23.83	-0.04	0.31	3.52
656	342.06	32.28406064	-103.84492771	21.21	25.12	-0.04	0.31	3.91
657	342.58	32.28406066	-103.84492202	20.47	24.14	-0.04	0.38	3.67
658	343.10	32.28406065	-103.84491640	19.69	22.11	-0.04	0.28	2.42
659	343.62	32.28406060	-103.84491092	20.16	21.68	-0.05	0.27	1.52
660	344.14	32.28406045	-103.84490590	22.42	27.07	-0.05	0.29	4.65
661	344.66	32.28406057	-103.84490048	24.34	28.91	-0.04	0.25	4.57
662	345.19	32.28406113	-103.84489441	24.53	29.92	-0.06	0.22	5.39
663	345.71	32.28406180	-103.84488853	17.27	14.38	-0.05	0.23	-2.89
664	346.23	32.28406259	-103.84488279	22.77	11.37	-0.05	0.31	-11.41
665	346.75	32.28406318	-103.84487697	26.17	29.38	-0.05	0.25	3.20
666	347.28	32.28406359	-103.84487108	24.14	30.66	-0.05	0.20	6.52
667	347.80	32.28406385	-103.84486527	20.23	28.09	-0.05	0.24	7.85
668	348.32	32.28406401	-103.84485947	19.61	23.87	-0.06	0.20	4.26
669	348.84	32.28406417	-103.84485370	18.79	22.27	-0.05	0.20	3.48
670	349.37	32.28406433	-103.84484794	17.03	20.43	-0.05	0.18	3.40
671	349.89	32.28406470	-103.84484231	16.88	17.81	-0.05	0.20	0.94
672	350.41	32.28406512	-103.84483670	17.27	18.87	-0.05	0.19	1.60
673	350.92	32.28406544	-103.84483099	16.76	16.68	-0.04	0.15	-0.08
674	351.43	32.28406575	-103.84482524	16.33	16.52	-0.05	0.20	0.20
675	351.96	32.28406589	-103.84481889	16.25	15.66	-0.01	0.24	-0.59
676	352.50	32.28406602	-103.84481253	16.33	14.92	0.00	0.23	-1.41
677	353.02	32.28406607	-103.84480680	14.30	11.88	-0.03	0.26	-2.42
678	353.54	32.28406621	-103.84480107	14.38	14.88	-0.01	0.25	0.51
679	354.07	32.28406680	-103.84479557	13.87	13.01	-0.04	0.20	-0.86
680	354.59	32.28406737	-103.84479012	15.35	16.06	-0.02	0.24	0.70
681	355.11	32.28406787	-103.84478483	-10.51	12.15	0.14	0.23	22.66
682	355.63	32.28406820	-103.84477939	4.06	10.35	0.00	0.17	6.29
683	356.15	32.28406817	-103.84477367	14.10	12.50	-0.04	0.16	-1.60
684	356.68	32.28406798	-103.84476798	13.83	13.16	-0.07	0.10	-0.66
685	357.20	32.28406758	-103.84476235	15.82	15.27	-0.05	0.16	-0.55
686	357.72	32.28406736	-103.84475663	14.34	12.42	-0.05	0.12	-1.91
687	358.24	32.28406731	-103.84475080	16.29	14.96	-0.05	0.17	-1.33
688	358.76	32.28406752	-103.84474529	17.15	14.92	-0.05	0.17	-2.23
689	359.29	32.28406791	-103.84473997	17.34	15.86	-0.05	0.17	-1.49
690	359.81	32.28406819	-103.84473442	17.93	15.08	-0.05	0.15	-2.85
691	360.33	32.28406842	-103.84472877	19.73	18.44	-0.03	0.20	-1.29
692	360.85	32.28406830	-103.84472409	22.70	12.77	-0.06	0.13	-9.92
693	361.38	32.28406807	-103.84471969	46.99	1.76	-0.06	0.14	-45.23

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
694	361.90	32.28406843	-103.84471536	103.01	-8.71	-0.04	0.16	-111.72
695	362.42	32.28406890	-103.84471105	138.20	5.04	-0.05	0.11	-133.16
696	362.94	32.28406933	-103.84470687	165.39	15.63	-0.05	0.18	-149.77
697	363.47	32.28406975	-103.84470270	151.02	22.50	-0.05	0.17	-128.52
698	363.99	32.28406985	-103.84469785	129.14	24.92	-0.05	0.15	-104.22
699	364.51	32.28407005	-103.84469299	146.48	27.03	-0.04	0.07	-119.45
700	365.03	32.28407102	-103.84468810	203.48	44.06	-0.05	0.16	-159.41
701	365.56	32.28407190	-103.84468298	257.54	40.31	-0.03	0.20	-217.23
702	366.08	32.28407235	-103.84467723	312.23	81.91	-0.04	0.16	-230.31
703	366.60	32.28407266	-103.84467141	329.34	132.23	-0.07	0.13	-197.11
704	367.12	32.28407255	-103.84466554	372.11	161.52	0.00	0.17	-210.59
705	367.64	32.28407237	-103.84465979	385.35	176.33	-0.03	0.13	-209.02
706	368.16	32.28407206	-103.84465432	372.58	172.97	-0.06	0.04	-199.61
707	368.69	32.28407192	-103.84464887	333.13	147.93	0.05	0.07	-185.20
708	369.21	32.28407203	-103.84464352	282.15	122.34	0.09	0.19	-159.80
709	369.73	32.28407243	-103.84463814	192.38	53.20	0.08	0.10	-139.18
710	370.25	32.28407310	-103.84463275	92.85	1.60	0.06	0.01	-91.25
711	370.78	32.28407367	-103.84462716	58.83	41.99	-0.01	-0.07	-16.84
712	371.30	32.28407418	-103.84462145	40.82	35.98	0.01	-0.13	-4.84
713	371.82	32.28407457	-103.84461637	37.97	26.84	0.09	0.06	-11.13
714	372.34	32.28407490	-103.84461158	30.12	13.83	0.06	-0.40	-16.29
715	372.87	32.28407755	-103.84460812	32.93	6.06	0.03	-0.48	-26.88
716	373.39	32.28408086	-103.84460504	31.95	-4.38	0.01	-0.63	-36.33
717	373.91	32.28408499	-103.84460325	45.39	14.22	0.06	-0.45	-31.17
718	374.43	32.28408924	-103.84460165	50.23	33.24	0.19	0.55	-16.99
719	374.95	32.28409274	-103.84460103	52.73	42.23	0.18	0.96	-10.51
720	375.48	32.28409621	-103.84460053	55.35	56.84	0.24	1.54	1.48
721	376.00	32.28409983	-103.84460186	60.16	70.55	0.22	2.05	10.39
722	376.52	32.28410344	-103.84460342	69.65	82.42	0.20	2.18	12.77
723	377.04	32.28410695	-103.84460665	79.26	66.99	0.19	1.95	-12.27
724	377.57	32.28411016	-103.84461031	104.49	60.08	0.07	1.14	-44.41
725	378.09	32.28411219	-103.84461560	120.20	61.21	0.03	0.17	-58.98
726	378.61	32.28411373	-103.84462090	155.04	16.84	-0.01	-0.44	-138.20
727	379.13	32.28411402	-103.84462621	173.28	16.17	-0.03	-0.66	-157.11
728	379.65	32.28411397	-103.84463155	201.06	32.54	-0.04	-0.65	-168.52
729	380.18	32.28411336	-103.84463695	196.33	34.38	-0.08	-0.81	-161.95
730	380.70	32.28411269	-103.84464169	132.50	4.41	-0.05	-0.51	-128.09
731	381.22	32.28411195	-103.84464567	57.11	-15.55	-0.06	-0.31	-72.66
732	381.74	32.28411170	-103.84464785	44.02	0.63	0.01	-0.12	-43.40
733	382.27	32.28411185	-103.84464853	40.04	5.94	0.02	-0.15	-34.10
734	382.79	32.28411199	-103.84464859	35.66	-5.98	0.03	-0.19	-41.64
735	383.31	32.28411212	-103.84464828	34.06	-8.09	0.02	-0.11	-42.15
736	383.83	32.28411170	-103.84464840	36.06	-1.52	0.02	-0.07	-37.58
737	384.36	32.28411105	-103.84464869	37.93	2.46	0.00	-0.15	-35.47
738	384.88	32.28411083	-103.84464930	36.76	-2.11	0.03	-0.07	-38.87
739	385.40	32.28411071	-103.84464999	39.30	-3.16	-0.01	-0.18	-42.46
740	385.92	32.28411069	-103.84465037	38.79	-0.98	0.03	-0.08	-39.77
741	386.44	32.28411067	-103.84465071	41.02	-3.67	0.02	-0.13	-44.69
742	386.97	32.28411120	-103.84464954	42.38	1.41	0.03	-0.12	-40.98
743	387.49	32.28411172	-103.84464839	44.14	3.79	0.04	-0.11	-40.35
744	388.01	32.28411197	-103.84464841	42.11	1.02	0.02	-0.07	-41.09
745	388.53	32.28411222	-103.84464854	40.39	-0.66	0.05	0.00	-41.06
746	389.05	32.28411248	-103.84464930	36.41	-3.52	0.02	-0.16	-39.92
747	389.58	32.28411256	-103.84465084	35.43	-2.31	-0.01	-0.27	-37.74
748	390.10	32.28411202	-103.84465511	33.13	11.41	-0.03	-0.20	-21.72
749	390.62	32.28411157	-103.84465996	24.53	27.03	-0.03	-0.21	2.50
750	391.14	32.28411135	-103.84466613	19.61	19.10	-0.07	-0.21	-0.51
751	391.67	32.28411118	-103.84467239	18.09	15.78	-0.09	-0.14	-2.31
752	392.19	32.28411109	-103.84467885	17.81	16.88	-0.06	-0.03	-0.94
753	392.71	32.28411112	-103.84468535	17.70	16.45	-0.05	0.04	-1.25
754	393.23	32.28411128	-103.84469198	15.82	13.05	-0.05	0.01	-2.77
755	393.76	32.28411129	-103.84469850	12.73	9.45	-0.08	-0.01	-3.28
756	394.28	32.28411118	-103.84470484	12.54	8.52	-0.05	-0.05	-4.02
757	394.80	32.28411058	-103.84471110	14.18	11.45	-0.04	0.01	-2.74
758	395.32	32.28410971	-103.84471731	13.83	9.81	-0.05	0.02	-4.02
759	395.84	32.28410870	-103.84472332	15.78	12.34	-0.03	0.13	-3.44
760	396.37	32.28410763	-103.84472929	13.87	11.06	-0.06	0.07	-2.81
761	396.89	32.28410681	-103.84473571	14.14	14.10	-0.03	0.23	-0.04
762	397.41	32.28410605	-103.84474225	13.32	10.27	-0.04	0.10	-3.05
763	397.92	32.28410533	-103.84474857	14.38	10.86	-0.05	0.11	-3.52
764	398.42	32.28410462	-103.84475485	13.98	13.40	-0.05	0.14	-0.59
765	398.96	32.28410418	-103.84476148	13.67	12.27	-0.04	0.14	-1.41
766	399.50	32.28410377	-103.84476810	14.22	14.18	-0.03	0.19	-0.04
767	400.02	32.28410346	-103.84477419	14.77	12.89	-0.04	0.18	-1.88
768	400.54	32.28410312	-103.84478035	12.93	10.35	-0.03	0.26	-2.58
769	401.07	32.28410261	-103.84478673	15.23	14.45	-0.04	0.21	-0.78
770	401.59	32.28410214	-103.84479310	15.20	13.87	-0.03	0.18	-1.33

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
771	402.11	32.28410175	-103.84479966	14.45	14.10	-0.04	0.14	-0.35
772	402.63	32.28410145	-103.84480614	14.81	14.49	-0.05	0.15	-0.31
773	403.15	32.28410132	-103.84481246	15.63	16.06	-0.04	0.19	0.43
774	403.68	32.28410125	-103.84481875	16.72	14.88	-0.05	0.18	-1.84
775	404.20	32.28410125	-103.84482496	18.56	17.11	-0.03	0.17	-1.45
776	404.72	32.28410115	-103.84483071	19.26	19.88	-0.04	0.17	0.63
777	405.24	32.28410096	-103.84483608	18.95	19.96	-0.06	0.19	1.02
778	405.76	32.28410133	-103.84484064	20.04	20.23	-0.05	0.17	0.20
779	406.29	32.28410211	-103.84484463	20.90	20.47	-0.05	0.13	-0.43
780	406.80	32.28410509	-103.84484684	21.02	21.13	-0.04	0.20	0.12
781	407.33	32.28410929	-103.84484822	20.12	21.33	-0.02	0.24	1.21
782	407.85	32.28411309	-103.84484811	20.51	23.13	-0.03	0.24	2.62
783	408.38	32.28411682	-103.84484751	19.81	21.88	-0.03	0.21	2.07
784	408.90	32.28411989	-103.84484530	19.38	21.84	0.00	0.23	2.46
785	409.42	32.28412285	-103.84484277	19.49	21.25	-0.01	0.28	1.76
786	409.94	32.28412374	-103.84483789	20.04	21.09	-0.03	0.21	1.06
787	410.47	32.28412446	-103.84483281	18.87	19.02	-0.06	0.20	0.16
788	410.99	32.28412442	-103.84482691	17.54	18.44	-0.04	0.13	0.90
789	411.51	32.28412439	-103.84482100	16.72	17.62	-0.05	0.16	0.90
790	412.03	32.28412437	-103.84481514	14.22	14.38	-0.05	0.14	0.16
791	412.56	32.28412444	-103.84480917	14.65	13.95	-0.03	0.16	-0.70
792	413.08	32.28412486	-103.84480301	14.84	15.74	-0.05	0.21	0.90
793	413.60	32.28412530	-103.84479698	15.55	14.30	-0.04	0.22	-1.25
794	414.12	32.28412578	-103.84479139	14.34	15.16	0.00	0.14	0.82
795	414.64	32.28412612	-103.84478567	15.12	13.59	-0.05	0.18	-1.52
796	415.16	32.28412622	-103.84477974	13.63	10.66	-0.05	0.18	-2.97
797	415.69	32.28412623	-103.84477390	14.96	13.48	-0.05	0.25	-1.48
798	416.21	32.28412613	-103.84476821	13.83	12.50	-0.03	0.21	-1.33
799	416.73	32.28412622	-103.84476237	15.08	14.41	-0.04	0.14	-0.66
800	417.25	32.28412647	-103.84475639	12.70	11.91	-0.05	0.21	-0.78
801	417.77	32.28412691	-103.84475047	12.77	9.53	-0.05	0.15	-3.24
802	418.30	32.28412746	-103.84474455	14.34	11.29	-0.05	0.18	-3.05
803	418.82	32.28412767	-103.84473835	13.32	10.59	-0.02	0.13	-2.73
804	419.34	32.28412773	-103.84473202	15.59	13.44	-0.03	0.18	-2.15
805	419.86	32.28412770	-103.84472598	11.13	6.60	-0.04	0.15	-4.53
806	420.39	32.28412763	-103.84471998	12.81	8.40	-0.03	0.14	-4.42
807	420.91	32.28412755	-103.84471384	12.31	8.67	-0.05	0.07	-3.63
808	421.43	32.28412746	-103.84470768	13.67	10.12	-0.05	0.02	-3.56
809	421.95	32.28412820	-103.84470171	11.13	5.82	-0.04	0.08	-5.31
810	422.48	32.28412897	-103.84469573	11.91	8.91	-0.05	0.02	-3.01
811	423.00	32.28412915	-103.84468927	12.73	8.01	-0.06	-0.05	-4.73
812	423.52	32.28412933	-103.84468286	17.15	16.41	-0.03	0.02	-0.74
813	424.04	32.28412945	-103.84467665	16.76	10.90	-0.05	0.02	-5.86
814	424.57	32.28412948	-103.84467054	15.59	12.34	-0.06	-0.12	-3.24
815	425.09	32.28412912	-103.84466485	14.88	10.04	-0.05	-0.13	-4.84
816	425.61	32.28412892	-103.84465941	30.43	22.73	-0.01	-0.05	-7.70
817	426.13	32.28412912	-103.84465461	27.38	6.95	-0.04	-0.13	-20.43
818	426.65	32.28412926	-103.84465116	93.20	-28.83	-0.02	-0.12	-122.03
819	427.18	32.28412931	-103.84464996	147.81	-40.16	-0.05	-0.14	-187.97
820	427.70	32.28412941	-103.84464832	155.35	-41.45	-0.01	-0.08	-196.80
821	428.22	32.28412956	-103.84464616	147.77	-37.42	-0.02	-0.24	-185.20
822	428.74	32.28412963	-103.84464307	178.59	-14.34	-0.07	-0.38	-192.93
823	429.26	32.28412964	-103.84463917	226.56	31.06	-0.01	-0.22	-195.51
824	429.79	32.28413016	-103.84463571	227.73	66.72	0.02	-0.30	-161.02
825	430.31	32.28413098	-103.84463251	218.48	62.73	0.00	-0.30	-155.74
826	430.83	32.28413120	-103.84462878	223.09	55.74	-0.02	-0.52	-167.34
827	431.35	32.28413119	-103.84462480	213.09	45.27	-0.07	-0.69	-167.81
828	431.88	32.28413240	-103.84462042	189.45	43.95	-0.09	-0.97	-145.51
829	432.40	32.28413392	-103.84461595	177.23	35.23	0.13	-0.65	-141.99
830	432.92	32.28413704	-103.84461321	192.85	90.59	0.52	1.90	-102.27
831	433.44	32.28414037	-103.84461071	169.38	120.27	0.33	1.61	-49.10
832	433.97	32.28414337	-103.84460971	83.87	102.50	0.05	0.86	18.63
833	434.49	32.28414631	-103.84460886	43.79	18.16	-0.06	-0.41	-25.63
834	435.01	32.28414861	-103.84460963	45.12	-3.36	-0.09	-0.83	-48.48
835	435.53	32.28415095	-103.84461063	40.98	-18.59	-0.11	-1.11	-59.57
836	436.05	32.28415356	-103.84461301	46.88	-25.12	-0.13	-1.35	-71.99
837	436.58	32.28415576	-103.84461565	51.76	-45.94	-0.13	-1.52	-97.70
838	437.10	32.28415657	-103.84461919	119.26	-47.19	-0.13	-1.77	-166.45
839	437.62	32.28415694	-103.84462266	207.85	-17.50	-0.01	-1.00	-225.35
840	438.14	32.28415634	-103.84462595	232.62	77.23	0.02	0.29	-155.39
841	438.66	32.28415583	-103.84462968	225.94	125.35	0.00	0.37	-100.59
842	439.19	32.28415545	-103.84463405	221.48	91.60	-0.02	-0.25	-129.88
843	439.71	32.28415506	-103.84463893	241.45	66.37	-0.04	-0.50	-175.08
844	440.23	32.28415464	-103.84464434	201.80	25.82	-0.06	-0.59	-175.98
845	440.75	32.28415436	-103.84465032	127.89	-17.31	-0.07	-0.79	-145.20
846	441.28	32.28415419	-103.84465672	68.24	-29.26	-0.04	-0.42	-97.50
847	441.80	32.28415421	-103.84466300	49.77	4.84	-0.03	-0.37	-44.92

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
848	442.32	32.28415433	-103.84466926	35.04	24.77	-0.04	-0.32	-10.27
849	442.84	32.28415459	-103.84467522	28.09	26.56	-0.06	-0.27	-1.52
850	443.36	32.28415490	-103.84468111	19.96	16.48	-0.02	-0.09	-3.48
851	443.89	32.28415491	-103.84468705	17.03	11.17	-0.06	-0.08	-5.86
852	444.41	32.28415485	-103.84469302	11.21	5.70	-0.04	-0.07	-5.51
853	444.92	32.28415448	-103.84469885	14.57	12.15	-0.05	-0.20	-2.42
854	445.43	32.28415409	-103.84470469	13.59	11.06	-0.04	-0.01	-2.54
855	445.96	32.28415367	-103.84471107	14.26	9.41	-0.05	0.01	-4.84
856	446.50	32.28415329	-103.84471748	14.34	12.77	-0.05	0.07	-1.56
857	447.02	32.28415341	-103.84472369	11.80	6.76	-0.02	0.17	-5.04
858	447.54	32.28415348	-103.84472994	14.02	11.25	-0.04	0.15	-2.77
859	448.06	32.28415335	-103.84473627	12.85	10.20	-0.05	0.01	-2.66
860	448.59	32.28415310	-103.84474250	13.20	11.56	-0.05	-0.01	-1.64
861	449.11	32.28415247	-103.84474846	12.03	8.48	-0.07	0.08	-3.55
862	449.63	32.28415187	-103.84475439	12.23	9.06	-0.04	0.14	-3.16
863	450.15	32.28415132	-103.84476042	14.06	11.17	-0.05	0.14	-2.89
864	450.67	32.28415081	-103.84476670	12.77	10.94	-0.03	0.19	-1.84
865	451.20	32.28415036	-103.84477340	14.06	11.06	-0.04	0.11	-3.01
866	451.72	32.28414997	-103.84477997	13.16	12.27	-0.05	0.13	-0.90
867	452.24	32.28414964	-103.84478639	14.45	13.75	-0.04	0.17	-0.70
868	452.76	32.28414948	-103.84479271	15.43	13.48	-0.06	0.16	-1.95
869	453.29	32.28414945	-103.84479895	14.65	12.58	-0.05	0.10	-2.07
870	453.81	32.28414902	-103.84480507	13.40	12.77	0.00	0.17	-0.63
871	454.33	32.28414840	-103.84481116	12.89	12.77	0.05	0.27	-0.12
872	454.85	32.28414773	-103.84481711	15.00	14.53	-0.01	0.24	-0.47
873	455.38	32.28414705	-103.84482303	15.43	15.08	-0.04	0.22	-0.35
874	455.89	32.28414683	-103.84482949	17.15	16.99	-0.04	0.20	-0.16
875	456.42	32.28414669	-103.84483623	17.38	16.09	-0.06	0.14	-1.29
876	456.94	32.28414642	-103.84484085	18.79	17.27	-0.04	0.15	-1.52
877	457.46	32.28414615	-103.84484531	18.91	18.48	-0.05	0.21	-0.43
878	457.99	32.28414657	-103.84484837	18.67	18.59	-0.03	0.19	-0.08
879	458.51	32.28414720	-103.84485129	20.39	20.63	-0.04	0.16	0.23
880	459.03	32.28414978	-103.84485288	21.09	20.04	-0.03	0.19	-1.06
881	459.56	32.28415245	-103.84485411	19.57	19.88	-0.05	0.17	0.31
882	460.08	32.28415531	-103.84485373	19.14	17.23	-0.03	0.21	-1.91
883	460.60	32.28415813	-103.84485274	18.56	16.60	-0.04	0.16	-1.95
884	461.12	32.28416071	-103.84485009	18.52	16.25	-0.05	0.16	-2.27
885	461.64	32.28416276	-103.84484657	17.97	18.40	-0.02	0.17	0.43
886	462.17	32.28416382	-103.84484147	18.01	18.75	-0.03	0.18	0.74
887	462.69	32.28416452	-103.84483593	17.11	16.06	-0.04	0.21	-1.05
888	463.21	32.28416475	-103.84482978	17.77	15.51	-0.05	0.24	-2.27
889	463.73	32.28416475	-103.84482367	14.45	14.38	-0.03	0.20	-0.08
890	464.25	32.28416453	-103.84481756	15.59	14.81	-0.05	0.11	-0.78
891	464.77	32.28416417	-103.84481143	14.88	13.71	-0.06	0.09	-1.17
892	465.30	32.28416373	-103.84480528	15.39	14.81	-0.05	0.18	-0.59
893	465.82	32.28416349	-103.84479920	14.30	13.13	-0.04	0.18	-1.17
894	466.34	32.28416335	-103.84479310	14.10	12.07	-0.04	0.16	-2.03
895	466.86	32.28416343	-103.84478701	13.83	11.76	-0.04	0.17	-2.07
896	467.39	32.28416358	-103.84478093	14.02	13.05	-0.06	0.07	-0.98
897	467.91	32.28416371	-103.84477505	12.97	10.35	-0.04	0.12	-2.62
898	468.43	32.28416385	-103.84476919	13.36	11.56	-0.05	0.12	-1.80
899	468.95	32.28416359	-103.84476373	13.40	11.99	-0.03	0.20	-1.41
900	469.48	32.28416331	-103.84475828	14.22	12.73	-0.04	0.09	-1.49
901	470.00	32.28416301	-103.84475246	12.62	11.76	-0.06	0.04	-0.86
902	470.52	32.28416279	-103.84474672	13.91	12.11	-0.04	0.13	-1.80
903	471.04	32.28416321	-103.84474169	13.24	12.07	-0.04	0.17	-1.17
904	471.56	32.28416358	-103.84473655	12.15	9.53	-0.05	0.06	-2.62
905	472.09	32.28416378	-103.84473104	11.56	6.17	-0.04	0.14	-5.39
906	472.61	32.28416385	-103.84472561	12.27	10.20	-0.04	0.20	-2.07
907	473.13	32.28416364	-103.84472038	13.95	11.91	-0.03	0.18	-2.03
908	473.65	32.28416366	-103.84471509	14.92	12.42	-0.02	0.20	-2.50
909	474.17	32.28416409	-103.84470970	15.35	13.59	-0.03	0.13	-1.76
910	474.70	32.28416446	-103.84470433	12.70	10.35	-0.03	0.12	-2.34
911	475.22	32.28416477	-103.84469899	14.45	8.05	-0.05	0.07	-6.41
912	475.74	32.28416520	-103.84469344	23.24	17.89	-0.03	0.09	-5.35
913	476.26	32.28416573	-103.84468768	12.70	10.27	-0.07	-0.13	-2.42
914	476.79	32.28416592	-103.84468227	90.00	-22.07	-0.06	-0.13	-112.07
915	477.31	32.28416592	-103.84467702	177.23	-2.85	-0.05	-0.07	-180.08
916	477.83	32.28416636	-103.84467187	211.41	24.45	-0.03	0.00	-186.95
917	478.35	32.28416698	-103.84466678	245.94	61.64	-0.08	-0.26	-184.30
918	478.87	32.28416778	-103.84466224	267.89	82.58	-0.04	-0.07	-185.31
919	479.40	32.28416864	-103.84465782	266.25	88.36	-0.06	-0.26	-177.89
920	479.92	32.28416867	-103.84465304	267.03	87.50	-0.03	-0.24	-179.53
921	480.44	32.28416860	-103.84464821	259.49	79.45	-0.03	-0.37	-180.04
922	480.96	32.28416898	-103.84464375	211.25	68.40	-0.08	-0.54	-142.85
923	481.49	32.28416940	-103.84463932	188.91	60.35	-0.05	-0.61	-128.55
924	482.01	32.28417032	-103.84463514	174.02	60.63	-0.03	-0.59	-113.40

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
925	482.53	32.28417131	-103.84463102	137.46	40.04	-0.10	-0.98	-97.42
926	483.05	32.28417271	-103.84462738	124.96	-3.20	-0.04	-1.18	-128.16
927	483.58	32.28417456	-103.84462450	135.20	20.20	0.00	-0.65	-115.00
928	484.10	32.28417804	-103.84462425	121.13	57.58	0.06	0.27	-63.56
929	484.62	32.28418158	-103.84462432	88.91	55.94	0.04	0.44	-32.97
930	485.14	32.28418523	-103.84462511	80.35	47.27	0.03	-0.08	-33.09
931	485.67	32.28418901	-103.84462580	88.05	91.60	0.01	0.34	3.56
932	486.19	32.28419296	-103.84462630	97.58	114.45	0.03	0.32	16.88
933	486.71	32.28419665	-103.84462782	103.24	97.58	0.01	0.27	-5.66
934	487.23	32.28420002	-103.84463042	159.41	56.88	-0.02	0.45	-102.54
935	487.75	32.28420215	-103.84463424	180.59	28.24	-0.09	-0.35	-152.34
936	488.28	32.28420333	-103.84463903	208.71	36.95	-0.09	-0.84	-171.76
937	488.80	32.28420369	-103.84464449	235.59	56.91	-0.05	-0.86	-178.67
938	489.32	32.28420361	-103.84465034	265.70	61.25	-0.08	-0.93	-204.45
939	489.85	32.28420334	-103.84465640	279.81	80.39	-0.04	-0.64	-199.41
940	490.36	32.28420301	-103.84466234	320.39	105.66	-0.05	-0.42	-214.73
941	490.88	32.28420245	-103.84466830	335.08	129.34	-0.07	-0.36	-205.74
942	491.41	32.28420183	-103.84467429	345.35	131.06	-0.05	-0.41	-214.30
943	491.92	32.28420090	-103.84467957	354.65	122.97	-0.04	-0.20	-231.68
944	492.42	32.28419994	-103.84468477	320.35	118.05	-0.06	-0.16	-202.31
945	492.96	32.28419865	-103.84469048	260.63	61.37	-0.05	-0.17	-199.26
946	493.49	32.28419736	-103.84469626	96.56	-32.11	-0.05	-0.15	-128.67
947	494.02	32.28419659	-103.84470229	47.31	-14.81	-0.05	-0.17	-62.11
948	494.54	32.28419585	-103.84470836	26.60	15.04	-0.05	-0.17	-11.56
949	495.06	32.28419526	-103.84471469	18.48	19.02	-0.06	-0.11	0.55
950	495.58	32.28419467	-103.84472099	18.98	16.45	-0.05	-0.08	-2.54
951	496.11	32.28419405	-103.84472713	14.26	11.13	-0.06	-0.04	-3.13
952	496.63	32.28419329	-103.84473320	13.40	10.23	-0.04	-0.07	-3.16
953	497.15	32.28419226	-103.84473914	12.97	10.04	-0.03	-0.05	-2.93
954	497.67	32.28419142	-103.84474533	12.81	10.82	-0.03	0.13	-1.99
955	498.20	32.28419084	-103.84475184	13.16	11.64	-0.03	0.16	-1.52
956	498.72	32.28419015	-103.84475824	12.73	8.91	-0.07	0.05	-3.83
957	499.24	32.28418936	-103.84476451	14.34	13.16	-0.04	0.15	-1.17
958	499.76	32.28418866	-103.84477063	13.67	12.85	-0.04	0.14	-0.82
959	500.29	32.28418801	-103.84477666	14.02	10.90	-0.03	0.13	-3.13
960	500.81	32.28418719	-103.84478283	14.73	13.95	-0.04	0.13	-0.78
961	501.33	32.28418627	-103.84478908	14.96	14.34	-0.03	0.19	-0.63
962	501.85	32.28418528	-103.84479510	16.21	12.19	-0.02	0.21	-4.02
963	502.38	32.28418425	-103.84480111	15.51	12.58	-0.04	0.20	-2.93
964	502.90	32.28418312	-103.84480791	15.98	13.83	-0.02	0.25	-2.15
965	503.42	32.28418198	-103.84481488	16.48	16.21	-0.04	0.17	-0.27
966	503.94	32.28418093	-103.84482165	15.59	13.75	-0.02	0.16	-1.84
967	504.46	32.28417988	-103.84482843	16.99	15.23	-0.03	0.22	-1.76
968	504.99	32.28417926	-103.84483487	17.34	14.73	-0.04	0.18	-2.62
969	505.51	32.28417861	-103.84484129	16.84	16.02	-0.04	0.14	-0.82
970	506.03	32.28417772	-103.84484768	16.21	15.35	-0.05	0.20	-0.86
971	506.56	32.28417682	-103.84485407	17.54	18.16	-0.02	0.18	0.63
972	507.08	32.28417594	-103.84486009	19.65	19.34	-0.03	0.21	-0.31
973	507.60	32.28417502	-103.84486622	18.28	15.82	-0.04	0.19	-2.46
974	508.12	32.28417404	-103.84487256	19.10	16.21	-0.04	0.22	-2.89
975	508.65	32.28417327	-103.84487906	17.50	17.58	-0.05	0.18	0.08
976	509.16	32.28417290	-103.84488571	18.98	20.82	-0.03	0.27	1.84
977	509.69	32.28417275	-103.84489242	19.73	21.52	-0.04	0.20	1.80
978	510.21	32.28417286	-103.84489894	24.10	18.71	-0.03	0.22	-5.39
979	510.73	32.28417277	-103.84490545	29.30	16.84	-0.03	0.25	-12.46
980	511.25	32.28417248	-103.84491189	29.41	24.14	-0.02	0.27	-5.27
981	511.78	32.28417199	-103.84491804	28.44	27.77	-0.02	0.29	-0.66
982	512.30	32.28417137	-103.84492401	26.52	22.89	-0.03	0.30	-3.63
983	512.82	32.28417051	-103.84492953	24.53	19.14	0.00	0.29	-5.39
984	513.34	32.28416955	-103.84493488	22.54	21.37	-0.04	0.26	-1.17
985	513.86	32.28416880	-103.84493895	22.11	25.08	-0.03	0.24	2.97
986	514.39	32.28416809	-103.84494268	22.54	23.63	-0.05	0.23	1.09
987	514.91	32.28416831	-103.84494550	23.20	21.33	-0.04	0.25	-1.88
988	515.43	32.28416869	-103.84494819	23.05	20.66	-0.03	0.26	-2.38
989	515.95	32.28417210	-103.84495022	24.92	21.13	-0.03	0.22	-3.79
990	516.48	32.28417567	-103.84495218	21.99	20.98	-0.05	0.20	-1.02
991	517.00	32.28417923	-103.84495351	20.70	21.41	-0.04	0.23	0.70
992	517.52	32.28418268	-103.84495462	19.41	21.13	-0.05	0.19	1.72
993	518.04	32.28418517	-103.84495391	18.40	20.94	-0.06	0.18	2.54
994	518.56	32.28418741	-103.84495246	18.32	20.55	-0.05	0.21	2.23
995	519.09	32.28418863	-103.84494807	18.71	21.02	-0.05	0.16	2.31
996	519.61	32.28418943	-103.84494334	19.38	21.88	-0.03	0.21	2.50
997	520.13	32.28418919	-103.84493788	21.25	21.91	-0.04	0.24	0.66
998	520.65	32.28418879	-103.84493226	22.70	22.85	-0.05	0.18	0.16
999	521.18	32.28418814	-103.84492642	23.91	19.45	-0.02	0.17	-4.45
1000	521.70	32.28418758	-103.84492055	26.88	19.49	-0.02	0.18	-7.38
1001	522.22	32.28418711	-103.84491462	27.38	22.23	-0.03	0.19	-5.16

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1002	522.74	32.28418686	-103.84490859	27.23	22.50	-0.03	0.20	-4.73
1003	523.26	32.28418677	-103.84490246	22.62	18.63	-0.02	0.23	-3.98
1004	523.78	32.28418679	-103.84489641	19.81	18.13	-0.03	0.19	-1.68
1005	524.31	32.28418688	-103.84489037	18.28	19.84	-0.04	0.20	1.56
1006	524.83	32.28418667	-103.84488429	17.31	19.18	-0.04	0.26	1.88
1007	525.35	32.28418634	-103.84487818	17.89	18.13	-0.03	0.26	0.23
1008	525.88	32.28418621	-103.84487251	19.96	18.87	-0.04	0.22	-1.09
1009	526.40	32.28418613	-103.84486694	20.70	15.82	-0.03	0.14	-4.88
1010	526.92	32.28418672	-103.84486127	20.78	17.77	-0.05	0.17	-3.01
1011	527.44	32.28418740	-103.84485557	20.04	16.88	-0.02	0.20	-3.16
1012	527.96	32.28418799	-103.84484982	18.56	16.60	-0.03	0.18	-1.95
1013	528.49	32.28418853	-103.84484404	16.60	15.27	-0.05	0.19	-1.33
1014	529.01	32.28418823	-103.84483755	15.94	14.14	-0.04	0.22	-1.80
1015	529.53	32.28418796	-103.84483109	15.86	14.18	-0.03	0.27	-1.68
1016	530.05	32.28418783	-103.84482488	15.90	14.96	-0.02	0.27	-0.94
1017	530.58	32.28418777	-103.84481869	16.37	14.30	-0.03	0.25	-2.07
1018	531.10	32.28418789	-103.84481271	16.21	14.45	-0.04	0.22	-1.76
1019	531.62	32.28418812	-103.84480681	15.90	13.56	-0.04	0.13	-2.34
1020	532.14	32.28418859	-103.84480120	14.81	12.93	-0.06	0.15	-1.88
1021	532.67	32.28418902	-103.84479530	14.88	14.30	-0.04	0.16	-0.59
1022	533.19	32.28418938	-103.84478925	13.52	11.13	-0.04	0.14	-2.38
1023	533.71	32.28418962	-103.84478308	14.57	13.13	-0.04	0.21	-1.45
1024	534.23	32.28418970	-103.84477683	14.02	12.85	-0.06	0.11	-1.17
1025	534.75	32.28418965	-103.84477069	12.81	10.31	-0.05	0.13	-2.50
1026	535.27	32.28418949	-103.84476461	14.18	13.59	-0.04	0.13	-0.59
1027	535.80	32.28418966	-103.84475878	13.91	11.37	-0.03	0.13	-2.54
1028	536.32	32.28419002	-103.84475303	12.23	10.47	-0.05	0.14	-1.76
1029	536.84	32.28419066	-103.84474740	13.05	9.65	-0.05	0.05	-3.40
1030	537.36	32.28419142	-103.84474179	13.32	11.95	-0.03	0.22	-1.37
1031	537.89	32.28419191	-103.84473605	13.16	10.94	-0.03	0.12	-2.23
1032	538.41	32.28419235	-103.84473026	13.13	10.55	-0.03	0.13	-2.58
1033	538.92	32.28419244	-103.84472504	14.73	11.99	-0.04	0.12	-2.74
1034	539.42	32.28419250	-103.84471989	16.56	15.59	-0.04	0.09	-0.98
1035	539.96	32.28419287	-103.84471431	18.79	16.25	-0.04	0.07	-2.54
1036	540.50	32.28419326	-103.84470873	25.78	22.03	-0.03	0.06	-3.75
1037	541.02	32.28419366	-103.84470351	10.51	17.85	-0.04	0.00	7.34
1038	541.54	32.28419403	-103.84469831	86.41	-42.85	-0.07	-0.10	-129.26
1039	542.06	32.28419429	-103.84469291	240.86	-40.23	-0.06	-0.11	-281.09
1040	542.58	32.28419448	-103.84468772	300.47	49.92	-0.06	-0.07	-250.55
1041	543.11	32.28419444	-103.84468317	327.54	100.94	-0.04	0.09	-226.60
1042	543.63	32.28419449	-103.84467870	327.66	124.30	-0.07	-0.09	-203.36
1043	544.15	32.28419475	-103.84467434	318.83	131.06	-0.08	-0.22	-187.77
1044	544.68	32.28419509	-103.84467039	319.53	141.80	-0.04	-0.11	-177.73
1045	545.20	32.28419555	-103.84466700	326.48	141.91	-0.03	-0.09	-184.57
1046	545.72	32.28419566	-103.84466419	312.46	133.83	-0.06	-0.32	-178.63
1047	546.24	32.28419542	-103.84466201	299.18	120.12	-0.06	-0.35	-179.06
1048	546.76	32.28419516	-103.84466095	295.78	109.84	-0.06	-0.37	-185.94
1049	547.28	32.28419488	-103.84466068	287.38	102.81	-0.06	-0.44	-184.57
1050	547.81	32.28419530	-103.84465917	287.03	100.70	-0.04	-0.34	-186.33
1051	548.33	32.28419606	-103.84465702	279.65	98.09	-0.04	-0.29	-181.56
1052	548.85	32.28419621	-103.84465335	250.90	84.57	-0.05	-0.40	-166.33
1053	549.37	32.28419615	-103.84464916	249.34	85.70	-0.03	-0.41	-163.63
1054	549.90	32.28419676	-103.84464534	230.66	104.18	-0.09	-0.71	-126.48
1055	550.42	32.28419751	-103.84464157	188.83	79.26	-0.08	-0.75	-109.57
1056	550.94	32.28419859	-103.84463781	161.56	29.61	-0.12	-1.11	-131.95
1057	551.46	32.28419972	-103.84463405	156.88	21.21	-0.09	-1.08	-135.66
1058	551.99	32.28420309	-103.84463171	140.08	28.09	-0.09	-1.01	-111.99
1059	552.51	32.28420648	-103.84462950	126.09	17.89	-0.07	-1.05	-108.20
1060	553.03	32.28420996	-103.84462864	122.50	33.67	-0.05	-0.79	-88.83
1061	553.55	32.28421344	-103.84462778	126.33	52.54	-0.02	-0.17	-73.79
1062	554.08	32.28421678	-103.84462689	146.88	63.83	0.01	0.29	-83.05
1063	554.60	32.28422001	-103.84462693	166.99	51.41	0.00	0.16	-115.59
1064	555.12	32.28422281	-103.84462948	195.23	71.80	-0.04	0.11	-123.44
1065	555.64	32.28422517	-103.84463289	191.45	74.10	-0.02	-0.11	-117.34
1066	556.16	32.28422665	-103.84463786	192.27	41.45	-0.08	-0.71	-150.82
1067	556.69	32.28422765	-103.84464309	189.77	24.61	-0.06	-0.84	-165.16
1068	557.21	32.28422802	-103.84464861	219.53	47.58	-0.08	-0.88	-171.95
1069	557.73	32.28422812	-103.84465428	226.21	50.16	-0.06	-0.92	-176.06
1070	558.25	32.28422796	-103.84466008	236.56	47.50	-0.06	-0.76	-189.06
1071	558.77	32.28422749	-103.84466594	242.50	68.16	-0.06	-0.52	-174.34
1072	559.30	32.28422681	-103.84467189	248.71	88.52	-0.07	-0.42	-160.20
1073	559.82	32.28422624	-103.84467797	267.23	100.63	-0.01	-0.27	-166.60
1074	560.34	32.28422572	-103.84468409	274.81	103.71	-0.04	-0.17	-171.09
1075	560.86	32.28422545	-103.84468967	263.75	101.13	-0.03	0.07	-162.62
1076	561.38	32.28422526	-103.84469511	267.34	103.01	-0.05	-0.10	-164.34
1077	561.91	32.28422514	-103.84470080	227.73	87.54	-0.06	-0.11	-140.20
1078	562.43	32.28422503	-103.84470654	177.03	34.02	-0.04	-0.02	-143.01

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1079	562.95	32.28422455	-103.84471233	89.18	-15.08	-0.02	0.13	-104.26
1080	563.47	32.28422404	-103.84471816	50.82	0.12	-0.04	-0.11	-50.70
1081	564.00	32.28422347	-103.84472460	33.52	23.95	-0.04	0.05	-9.57
1082	564.52	32.28422292	-103.84473107	25.16	23.44	-0.05	0.01	-1.72
1083	565.04	32.28422253	-103.84473758	18.09	19.65	-0.03	0.14	1.56
1084	565.56	32.28422217	-103.84474410	14.53	12.66	-0.04	-0.03	-1.88
1085	566.08	32.28422193	-103.84475062	13.71	14.34	-0.04	0.08	0.63
1086	566.61	32.28422170	-103.84475713	15.82	15.59	-0.05	0.02	-0.23
1087	567.13	32.28422153	-103.84476357	13.95	15.39	-0.03	0.22	1.45
1088	567.65	32.28422129	-103.84476993	11.99	10.04	-0.03	0.20	-1.95
1089	568.18	32.28422096	-103.84477616	13.09	10.70	-0.05	0.12	-2.38
1090	568.70	32.28422054	-103.84478243	11.02	9.73	-0.03	0.20	-1.29
1091	569.22	32.28422002	-103.84478877	13.24	11.60	-0.06	0.09	-1.64
1092	569.74	32.28421964	-103.84479531	12.58	11.76	-0.04	0.11	-0.82
1093	570.26	32.28421938	-103.84480201	13.40	11.13	-0.04	0.15	-2.27
1094	570.79	32.28421934	-103.84480858	13.28	13.13	-0.03	0.20	-0.16
1095	571.31	32.28421943	-103.84481504	14.41	12.23	-0.04	0.15	-2.19
1096	571.83	32.28421941	-103.84482177	14.61	12.77	-0.04	0.19	-1.84
1097	572.35	32.28421934	-103.84482865	12.97	11.95	-0.03	0.21	-1.02
1098	572.87	32.28421916	-103.84483551	15.94	17.07	-0.06	0.14	1.13
1099	573.40	32.28421894	-103.84484234	13.63	10.74	-0.03	0.23	-2.89
1100	573.92	32.28421813	-103.84484951	15.55	13.32	-0.05	0.18	-2.23
1101	574.44	32.28421724	-103.84485673	14.84	13.79	-0.03	0.17	-1.06
1102	574.96	32.28421606	-103.84486353	15.23	12.42	-0.05	0.20	-2.81
1103	575.49	32.28421487	-103.84487032	15.59	17.11	-0.05	0.16	1.52
1104	576.01	32.28421394	-103.84487712	15.82	15.51	-0.03	0.22	-0.31
1105	576.53	32.28421308	-103.84488392	15.08	14.84	-0.04	0.26	-0.23
1106	577.05	32.28421277	-103.84489072	17.11	15.27	-0.04	0.20	-1.84
1107	577.57	32.28421248	-103.84489739	13.83	14.73	-0.01	0.21	0.90
1108	578.10	32.28421227	-103.84490352	16.68	15.47	-0.04	0.19	-1.21
1109	578.63	32.28421234	-103.84490942	16.95	16.37	-0.05	0.17	-0.59
1110	579.14	32.28421301	-103.84491438	17.62	17.77	-0.06	0.20	0.16
1111	579.66	32.28421337	-103.84491947	19.02	17.15	-0.05	0.20	-1.88
1112	580.19	32.28421324	-103.84492462	19.10	15.47	-0.05	0.21	-3.63
1113	580.71	32.28421292	-103.84492954	19.49	18.71	-0.05	0.20	-0.78
1114	581.23	32.28421238	-103.84493427	17.89	18.71	-0.06	0.20	0.82
1115	581.75	32.28421184	-103.84493865	17.77	18.71	-0.05	0.19	0.94
1116	582.27	32.28421129	-103.84494280	17.50	18.71	-0.05	0.22	1.21
1117	582.80	32.28421153	-103.84494603	16.25	16.33	-0.05	0.18	0.08
1118	583.32	32.28421219	-103.84494871	16.80	17.23	-0.05	0.16	0.43
1119	583.84	32.28421264	-103.84495017	16.41	15.94	-0.06	0.17	-0.47
1120	584.36	32.28421302	-103.84495116	17.07	17.42	-0.05	0.20	0.35
1121	584.89	32.28421327	-103.84495186	16.64	15.51	-0.06	0.19	-1.13
1122	585.41	32.28421350	-103.84495249	16.52	16.56	-0.07	0.18	0.04
1123	585.92	32.28421355	-103.84495258	15.70	15.23	-0.06	0.22	-0.47
1124	586.43	32.28421357	-103.84495261	16.25	16.25	-0.06	0.17	0.00
1125	586.96	32.28421345	-103.84495235	16.68	15.90	-0.06	0.19	-0.78
1126	587.50	32.28421332	-103.84495205	16.72	16.95	-0.06	0.16	0.23
1127	588.02	32.28421330	-103.84495151	16.48	16.60	-0.06	0.20	0.12
1128	588.54	32.28421327	-103.84495108	15.86	15.74	-0.06	0.21	-0.12
1129	589.06	32.28421313	-103.84495131	16.41	15.90	-0.06	0.20	-0.51
1130	589.59	32.28421309	-103.84495146	16.37	16.64	-0.06	0.21	0.27
1131	590.11	32.28421337	-103.84495137	16.25	16.17	-0.07	0.19	-0.08
1132	590.63	32.28421358	-103.84495126	16.29	15.31	-0.06	0.21	-0.98
1133	591.15	32.28421366	-103.84495107	16.17	15.94	-0.07	0.18	-0.23
1134	591.67	32.28421363	-103.84495083	16.60	15.78	-0.07	0.20	-0.82
1135	592.20	32.28421343	-103.84495055	16.25	15.51	-0.06	0.21	-0.74
1136	592.72	32.28421328	-103.84495042	16.29	16.21	-0.06	0.23	-0.08
1137	593.24	32.28421317	-103.84495046	16.09	15.51	-0.04	0.19	-0.59
1138	593.76	32.28421273	-103.84495037	16.91	16.88	-0.05	0.18	-0.04
1139	594.29	32.28421207	-103.84495018	16.48	16.25	-0.05	0.21	-0.23
1140	594.81	32.28421146	-103.84494998	17.42	18.71	-0.07	0.18	1.29
1141	595.33	32.28421088	-103.84494977	16.95	18.48	-0.08	0.15	1.52
1142	595.85	32.28421073	-103.84494921	16.88	17.11	-0.07	0.18	0.23
1143	596.38	32.28421072	-103.84494853	17.93	18.48	-0.07	0.17	0.55
1144	596.90	32.28421089	-103.84494607	17.54	17.27	-0.07	0.16	-0.27
1145	597.42	32.28421108	-103.84494325	17.85	16.52	-0.08	0.13	-1.33
1146	597.94	32.28421127	-103.84493912	18.63	17.07	-0.07	0.18	-1.56
1147	598.46	32.28421144	-103.84493488	19.57	18.98	-0.05	0.23	-0.59
1148	598.99	32.28421128	-103.84492882	21.33	19.26	-0.04	0.17	-2.07
1149	599.51	32.28421115	-103.84492274	21.48	18.09	-0.02	0.23	-3.40
1150	600.03	32.28421136	-103.84491645	18.28	17.46	-0.06	0.22	-0.82
1151	600.56	32.28421156	-103.84491008	18.59	18.40	-0.05	0.19	-0.20
1152	601.07	32.28421174	-103.84490402	17.62	20.16	-0.07	0.17	2.54
1153	601.60	32.28421204	-103.84489790	17.42	16.21	-0.06	0.18	-1.21
1154	602.12	32.28421266	-103.84489197	16.17	17.62	-0.05	0.19	1.45
1155	602.64	32.28421327	-103.84488591	14.02	15.47	-0.03	0.26	1.45

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1156	603.16	32.28421385	-103.84487962	15.74	17.38	-0.03	0.34	1.64
1157	603.69	32.28421436	-103.84487328	14.96	13.87	-0.05	0.25	-1.09
1158	604.21	32.28421475	-103.84486689	15.98	15.82	-0.05	0.20	-0.16
1159	604.73	32.28421506	-103.84486078	16.13	14.84	-0.05	0.24	-1.29
1160	605.25	32.28421530	-103.84485495	15.90	13.59	-0.05	0.20	-2.30
1161	605.77	32.28421579	-103.84484922	15.39	13.75	-0.05	0.21	-1.64
1162	606.30	32.28421644	-103.84484351	15.04	13.32	-0.05	0.18	-1.72
1163	606.82	32.28421732	-103.84483794	12.81	13.48	-0.03	0.18	0.66
1164	607.34	32.28421830	-103.84483249	12.15	12.19	-0.04	0.21	0.04
1165	607.86	32.28421903	-103.84482629	14.53	14.45	-0.05	0.17	-0.08
1166	608.39	32.28421968	-103.84481987	13.63	12.62	-0.05	0.19	-1.02
1167	608.91	32.28422010	-103.84481393	12.89	11.29	-0.04	0.19	-1.60
1168	609.43	32.28422048	-103.84480803	13.48	11.84	-0.04	0.17	-1.64
1169	609.95	32.28422095	-103.84480208	13.91	13.32	-0.05	0.16	-0.59
1170	610.47	32.28422144	-103.84479614	13.75	13.24	-0.04	0.15	-0.51
1171	611.00	32.28422241	-103.84479052	14.06	14.22	-0.05	0.15	0.16
1172	611.52	32.28422337	-103.84478490	11.48	10.86	-0.02	0.19	-0.63
1173	612.04	32.28422433	-103.84477939	12.19	10.04	-0.04	0.22	-2.15
1174	612.56	32.28422515	-103.84477395	12.66	10.43	-0.06	0.08	-2.23
1175	613.08	32.28422551	-103.84476846	12.42	10.51	-0.04	0.16	-1.91
1176	613.61	32.28422579	-103.84476296	12.62	11.13	-0.04	0.18	-1.48
1177	614.13	32.28422588	-103.84475747	13.28	12.11	-0.05	0.15	-1.17
1178	614.65	32.28422618	-103.84475216	14.81	15.12	-0.06	0.03	0.31
1179	615.17	32.28422685	-103.84474717	20.27	21.72	-0.07	0.06	1.45
1180	615.70	32.28422743	-103.84474236	15.66	17.46	-0.05	0.17	1.80
1181	616.22	32.28422789	-103.84473777	27.03	1.72	-0.05	0.07	-25.31
1182	616.74	32.28422806	-103.84473361	62.38	-8.36	-0.04	0.27	-70.74
1183	617.26	32.28422798	-103.84472979	91.17	-11.64	-0.04	0.29	-102.81
1184	617.79	32.28422858	-103.84472650	115.31	-1.68	-0.05	0.11	-116.99
1185	618.31	32.28422959	-103.84472355	130.04	25.82	-0.06	0.16	-104.22
1186	618.83	32.28422957	-103.84472026	138.95	41.84	-0.03	0.29	-97.11
1187	619.35	32.28422913	-103.84471682	146.80	31.33	-0.05	0.07	-115.47
1188	619.87	32.28422923	-103.84471332	155.47	31.88	-0.06	0.16	-123.59
1189	620.40	32.28422945	-103.84470980	184.69	43.71	-0.07	0.00	-140.98
1190	620.92	32.28423020	-103.84470633	208.01	63.95	-0.05	0.22	-144.06
1191	621.44	32.28423102	-103.84470284	213.63	69.34	-0.06	0.05	-144.30
1192	621.96	32.28423113	-103.84469869	236.76	76.17	-0.05	0.00	-160.59
1193	622.48	32.28423123	-103.84469446	251.80	88.98	-0.02	0.27	-162.81
1194	623.01	32.28423156	-103.84468962	253.01	92.89	-0.07	-0.03	-160.12
1195	623.53	32.28423197	-103.84468487	240.00	92.81	-0.06	-0.01	-147.19
1196	624.05	32.28423297	-103.84468071	230.08	86.60	-0.04	-0.01	-143.48
1197	624.57	32.28423377	-103.84467642	194.92	80.47	-0.07	-0.10	-114.45
1198	625.10	32.28423383	-103.84467173	167.54	51.09	-0.08	-0.26	-116.45
1199	625.62	32.28423399	-103.84466707	168.01	31.84	-0.04	-0.21	-136.17
1200	626.14	32.28423437	-103.84466252	154.65	26.02	-0.07	-0.30	-128.63
1201	626.66	32.28423494	-103.84465810	161.33	21.56	-0.08	-0.42	-139.77
1202	627.19	32.28423581	-103.84465388	177.11	16.60	-0.04	-0.37	-160.51
1203	627.71	32.28423646	-103.84464953	177.58	30.47	-0.06	-0.55	-147.11
1204	628.23	32.28423688	-103.84464502	179.02	33.36	-0.05	-0.56	-145.66
1205	628.75	32.28423721	-103.84464092	173.98	27.97	-0.07	-0.79	-146.02
1206	629.27	32.28423748	-103.84463713	153.16	22.73	-0.07	-0.79	-130.43
1207	629.80	32.28423810	-103.84463365	135.82	15.27	-0.10	-0.94	-120.55
1208	630.32	32.28423893	-103.84463033	119.30	4.02	-0.10	-1.26	-115.27
1209	630.84	32.28424031	-103.84462679	114.22	1.25	-0.05	-1.03	-112.97
1210	631.36	32.28424191	-103.84462315	84.18	29.22	0.05	0.21	-54.96
1211	631.88	32.28424508	-103.84462203	59.57	5.27	0.04	-0.33	-54.30
1212	632.41	32.28424860	-103.84462147	53.09	-12.46	-0.03	-0.67	-65.55
1213	632.91	32.28425221	-103.84462168	50.23	-28.13	0.00	-0.90	-78.36
1214	633.43	32.28425587	-103.84462198	56.37	-21.60	-0.04	-1.23	-77.97
1215	633.96	32.28425929	-103.84462246	61.64	-25.90	-0.03	-1.18	-87.54
1216	634.50	32.28426257	-103.84462315	81.17	-33.40	-0.02	-1.40	-114.57
1217	635.02	32.28426400	-103.84462654	97.11	-47.23	-0.03	-1.36	-144.34
1218	635.54	32.28426529	-103.84463006	73.71	-10.66	-0.05	-0.38	-84.38
1219	636.06	32.28426581	-103.84463422	37.46	-17.97	-0.09	-0.63	-55.43
1220	636.58	32.28426620	-103.84463840	23.01	-17.54	-0.08	-0.72	-40.55
1221	637.11	32.28426621	-103.84464274	15.86	-16.68	-0.04	-0.76	-32.54
1222	637.63	32.28426595	-103.84464688	15.20	-9.92	-0.03	-0.70	-25.12
1223	638.15	32.28426516	-103.84465076	5.98	-18.24	-0.09	-1.00	-24.22
1224	638.67	32.28426470	-103.84465505	14.96	-13.67	-0.10	-0.95	-28.63
1225	639.20	32.28426472	-103.84465987	10.08	-15.63	-0.07	-0.89	-25.70
1226	639.72	32.28426469	-103.84466474	15.82	-3.20	-0.09	-0.72	-19.02
1227	640.24	32.28426462	-103.84466963	19.06	0.74	-0.08	-0.62	-18.32
1228	640.76	32.28426413	-103.84467413	20.47	5.78	-0.08	-0.48	-14.69
1229	641.29	32.28426333	-103.84467835	28.52	18.67	-0.11	-0.50	-9.84
1230	641.81	32.28426281	-103.84468289	25.47	26.56	-0.05	-0.21	1.09
1231	642.33	32.28426242	-103.84468759	57.11	-8.13	-0.06	-0.24	-65.23
1232	642.85	32.28426259	-103.84469207	126.56	-26.21	-0.07	-0.06	-152.77

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1233	643.38	32.28426294	-103.84469647	187.73	0.59	-0.06	-0.14	-187.15
1234	643.90	32.28426276	-103.84470115	230.59	50.55	-0.08	-0.10	-180.04
1235	644.42	32.28426248	-103.84470588	231.84	105.39	-0.07	-0.04	-126.45
1236	644.94	32.28426244	-103.84471113	248.95	120.12	-0.05	0.14	-128.83
1237	645.46	32.28426244	-103.84471644	201.88	91.52	-0.05	0.09	-110.35
1238	645.98	32.28426278	-103.84472140	170.43	57.93	-0.04	0.10	-112.50
1239	646.50	32.28426310	-103.84472639	134.61	45.12	-0.06	-0.02	-89.49
1240	647.03	32.28426308	-103.84473158	107.89	54.30	-0.06	0.10	-53.59
1241	647.55	32.28426295	-103.84473676	112.73	99.69	-0.03	0.18	-13.05
1242	648.07	32.28426235	-103.84474160	100.47	88.09	-0.02	0.17	-12.38
1243	648.60	32.28426186	-103.84474670	131.06	35.70	-0.05	0.19	-95.35
1244	649.12	32.28426173	-103.84475243	169.45	15.63	-0.06	0.14	-153.83
1245	649.64	32.28426169	-103.84475799	134.53	14.57	-0.01	0.24	-119.96
1246	650.16	32.28426181	-103.84476305	63.67	-1.21	0.03	0.25	-64.88
1247	650.68	32.28426182	-103.84476795	43.24	14.53	-0.01	0.32	-28.71
1248	651.21	32.28426168	-103.84477260	29.02	26.48	-0.05	0.19	-2.54
1249	651.73	32.28426158	-103.84477686	20.55	28.40	-0.05	0.19	7.85
1250	652.25	32.28426151	-103.84478073	18.20	23.20	-0.04	0.23	5.00
1251	652.77	32.28426155	-103.84478283	15.43	18.16	-0.04	0.21	2.73
1252	653.29	32.28426168	-103.84478375	15.31	17.70	-0.07	0.10	2.38
1253	653.81	32.28426182	-103.84478422	15.74	17.42	-0.03	0.16	1.68
1254	654.34	32.28426196	-103.84478448	15.98	17.73	-0.03	0.23	1.76
1255	654.86	32.28426211	-103.84478480	16.37	19.65	-0.03	0.16	3.28
1256	655.39	32.28426225	-103.84478514	16.41	18.98	-0.05	0.15	2.58
1257	655.91	32.28426223	-103.84478518	16.29	18.87	-0.04	0.17	2.58
1258	656.43	32.28426219	-103.84478517	15.66	15.82	-0.04	0.12	0.16
1259	656.95	32.28426226	-103.84478517	15.27	15.63	-0.05	0.12	0.35
1260	657.47	32.28426233	-103.84478516	16.64	18.40	-0.04	0.13	1.76
1261	657.99	32.28426229	-103.84478513	14.45	15.82	-0.05	0.16	1.37
1262	658.52	32.28426225	-103.84478507	15.59	16.21	-0.03	0.21	0.62
1263	659.04	32.28426228	-103.84478486	14.88	18.56	-0.05	0.19	3.67
1264	659.56	32.28426230	-103.84478467	14.81	17.42	-0.02	0.22	2.62
1265	660.08	32.28426233	-103.84478454	15.16	16.48	-0.03	0.26	1.33
1266	660.61	32.28426234	-103.84478448	15.74	17.23	-0.02	0.15	1.49
1267	661.13	32.28426231	-103.84478458	15.43	18.16	-0.04	0.16	2.73
1268	661.65	32.28426231	-103.84478468	15.12	18.91	-0.04	0.17	3.79
1269	662.17	32.28426233	-103.84478479	16.02	20.86	-0.02	0.17	4.84
1270	662.69	32.28426240	-103.84478492	16.45	19.53	-0.04	0.18	3.09
1271	663.22	32.28426252	-103.84478505	14.41	17.38	-0.02	0.23	2.97
1272	663.74	32.28426260	-103.84478504	16.17	18.28	-0.05	0.12	2.11
1273	664.26	32.28426267	-103.84478492	16.80	18.75	-0.03	0.16	1.95
1274	664.78	32.28426267	-103.84478482	15.43	18.09	-0.03	0.18	2.66
1275	665.31	32.28426264	-103.84478473	14.88	17.23	-0.03	0.15	2.34
1276	665.83	32.28426264	-103.84478468	15.86	16.80	-0.03	0.16	0.94
1277	666.35	32.28426266	-103.84478464	14.45	15.78	-0.02	0.21	1.33
1278	666.87	32.28426261	-103.84478461	14.92	17.15	-0.02	0.22	2.23
1279	667.40	32.28426254	-103.84478459	15.16	16.37	-0.02	0.22	1.21
1280	667.92	32.28426252	-103.84478456	15.00	16.41	-0.02	0.15	1.41
1281	668.44	32.28426251	-103.84478452	14.57	15.47	-0.03	0.18	0.90
1282	668.96	32.28426249	-103.84478458	15.23	16.25	-0.02	0.18	1.02
1283	669.49	32.28426248	-103.84478465	15.43	17.93	-0.04	0.15	2.50
1284	670.01	32.28426254	-103.84478482	14.34	15.98	-0.03	0.13	1.64
1285	670.53	32.28426259	-103.84478496	14.26	16.25	-0.04	0.19	1.99
1286	671.05	32.28426259	-103.84478490	15.90	17.89	-0.03	0.13	1.99
1287	671.57	32.28426258	-103.84478484	16.41	17.27	-0.03	0.18	0.86
1288	672.09	32.28426256	-103.84478475	15.94	17.97	-0.03	0.13	2.03
1289	672.62	32.28426253	-103.84478469	16.02	17.85	-0.03	0.11	1.84
1290	673.14	32.28426251	-103.84478468	15.66	18.56	-0.03	0.21	2.89
1291	673.66	32.28426245	-103.84478467	15.43	16.41	-0.02	0.21	0.98
1292	674.18	32.28426234	-103.84478464	14.26	17.93	-0.03	0.20	3.67
1293	674.71	32.28426229	-103.84478462	13.83	17.03	-0.04	0.15	3.20
1294	675.23	32.28426230	-103.84478459	15.12	15.94	-0.04	0.16	0.82
1295	675.75	32.28426232	-103.84478462	15.31	17.97	-0.05	0.15	2.66
1296	676.27	32.28426233	-103.84478467	16.13	18.71	-0.03	0.21	2.58
1297	676.80	32.28426238	-103.84478481	15.23	15.78	-0.03	0.18	0.55
1298	677.32	32.28426245	-103.84478498	15.74	18.24	-0.04	0.19	2.50
1299	677.84	32.28426246	-103.84478490	15.94	17.23	-0.03	0.15	1.29
1300	678.36	32.28426245	-103.84478473	14.65	17.66	-0.02	0.23	3.01
1301	678.88	32.28426248	-103.84478466	15.23	19.53	-0.02	0.21	4.30
1302	679.41	32.28426253	-103.84478462	15.74	18.75	-0.02	0.18	3.01
1303	679.92	32.28426252	-103.84478455	16.21	16.37	-0.02	0.12	0.16
1304	680.42	32.28426250	-103.84478447	15.12	17.73	-0.02	0.20	2.62
1305	680.96	32.28426258	-103.84478478	14.57	15.74	-0.02	0.23	1.17
1306	681.50	32.28426266	-103.84478509	16.76	19.22	-0.04	0.19	2.46
1307	682.02	32.28426269	-103.84478498	15.98	18.79	-0.03	0.24	2.81
1308	682.54	32.28426270	-103.84478487	15.66	17.58	-0.03	0.16	1.91
1309	683.06	32.28426258	-103.84478483	15.31	17.66	-0.05	0.11	2.34

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1310	683.58	32.28426250	-103.84478486	15.12	15.90	-0.04	0.13	0.78
1311	684.11	32.28426254	-103.84478510	15.51	18.91	-0.04	0.14	3.40
1312	684.63	32.28426256	-103.84478530	15.78	15.47	-0.04	0.21	-0.31
1313	685.15	32.28426253	-103.84478545	15.47	17.62	-0.05	0.19	2.15
1314	685.67	32.28426251	-103.84478557	16.29	17.46	-0.04	0.21	1.17
1315	686.19	32.28426250	-103.84478564	15.86	16.52	-0.05	0.18	0.66
1316	686.72	32.28426249	-103.84478556	16.56	18.48	-0.05	0.12	1.91
1317	687.24	32.28426249	-103.84478533	15.74	18.83	-0.02	0.23	3.09
1318	687.76	32.28426251	-103.84478525	15.47	16.68	-0.02	0.23	1.21
1319	688.28	32.28426254	-103.84478527	15.08	17.54	-0.03	0.15	2.46
1320	688.81	32.28426214	-103.84478625	16.88	20.23	-0.03	0.18	3.36
1321	689.33	32.28426153	-103.84478772	15.78	18.59	-0.01	0.19	2.81
1322	689.85	32.28426076	-103.84479121	13.95	15.39	-0.01	0.23	1.45
1323	690.37	32.28425994	-103.84479539	15.66	16.21	0.00	0.26	0.55
1324	690.89	32.28425887	-103.84480060	13.71	14.38	-0.03	0.26	0.66
1325	691.42	32.28425775	-103.84480603	12.50	10.82	-0.03	0.20	-1.68
1326	691.94	32.28425708	-103.84481265	11.91	10.00	-0.02	0.20	-1.91
1327	692.46	32.28425645	-103.84481939	12.66	11.56	-0.04	0.17	-1.09
1328	692.98	32.28425616	-103.84482647	13.79	14.45	0.02	0.26	0.66
1329	693.51	32.28425584	-103.84483358	14.57	14.10	-0.03	0.27	-0.47
1330	694.03	32.28425517	-103.84484072	13.98	13.48	0.02	0.24	-0.51
1331	694.55	32.28425448	-103.84484781	14.34	13.24	-0.02	0.23	-1.09
1332	695.07	32.28425375	-103.84485465	12.70	10.78	-0.03	0.19	-1.91
1333	695.59	32.28425304	-103.84486144	12.85	9.26	-0.04	0.23	-3.59
1334	696.12	32.28425235	-103.84486816	15.35	10.70	-0.04	0.23	-4.65
1335	696.64	32.28425174	-103.84487479	16.60	15.74	-0.04	0.18	-0.86
1336	697.16	32.28425127	-103.84488126	14.88	13.75	-0.05	0.09	-1.13
1337	697.68	32.28425077	-103.84488769	14.96	12.70	-0.04	0.17	-2.27
1338	698.21	32.28425023	-103.84489405	15.74	13.98	-0.04	0.23	-1.76
1339	698.73	32.28424994	-103.84490051	15.51	15.27	-0.01	0.24	-0.23
1340	699.25	32.28424989	-103.84490706	15.20	13.98	-0.03	0.18	-1.21
1341	699.77	32.28424985	-103.84491339	14.30	12.89	-0.03	0.23	-1.41
1342	700.30	32.28424982	-103.84491962	15.23	13.36	-0.03	0.23	-1.88
1343	700.82	32.28424954	-103.84492544	14.34	13.28	-0.06	0.15	-1.06
1344	701.34	32.28424915	-103.84493106	13.91	11.95	-0.03	0.24	-1.95
1345	701.87	32.28424832	-103.84493564	14.34	13.63	-0.04	0.25	-0.70
1346	702.38	32.28424739	-103.84493983	13.20	11.80	-0.04	0.17	-1.41
1347	702.91	32.28424585	-103.84494387	13.75	12.11	-0.03	0.18	-1.64
1348	703.43	32.28424422	-103.84494788	13.13	12.93	-0.02	0.23	-0.20
1349	703.95	32.28424685	-103.84494829	12.66	13.13	0.03	0.23	0.47
1350	704.47	32.28424980	-103.84494844	14.38	13.95	-0.01	0.24	-0.43
1351	705.00	32.28425417	-103.84494746	13.20	13.67	-0.02	0.23	0.47
1352	705.52	32.28425835	-103.84494639	14.06	14.26	-0.04	0.19	0.19
1353	706.04	32.28426157	-103.84494444	14.10	13.67	-0.03	0.17	-0.43
1354	706.56	32.28426433	-103.84494181	13.59	12.73	-0.02	0.18	-0.86
1355	707.08	32.28426522	-103.84493643	13.83	12.62	-0.01	0.19	-1.21
1356	707.61	32.28426577	-103.84493095	14.92	14.57	-0.02	0.18	-0.35
1357	708.13	32.28426541	-103.84492528	14.45	13.71	-0.02	0.22	-0.74
1358	708.65	32.28426504	-103.84492028	14.77	12.70	-0.04	0.21	-2.07
1359	709.17	32.28426465	-103.84491643	13.91	12.81	-0.02	0.17	-1.09
1360	709.69	32.28426440	-103.84491425	14.73	12.70	-0.03	0.12	-2.03
1361	710.22	32.28426432	-103.84491409	16.33	13.59	-0.03	0.22	-2.73
1362	710.74	32.28426420	-103.84491388	15.82	12.58	-0.02	0.15	-3.24
1363	711.26	32.28426407	-103.84491361	15.98	12.27	-0.03	0.19	-3.71
1364	711.78	32.28426414	-103.84491350	17.03	13.20	-0.01	0.28	-3.83
1365	712.31	32.28426433	-103.84491347	17.54	12.54	0.00	0.35	-5.00
1366	712.83	32.28426429	-103.84491360	18.20	13.01	0.00	0.34	-5.20
1367	713.35	32.28426414	-103.84491380	17.42	13.05	-0.03	0.21	-4.38
1368	713.87	32.28426417	-103.84491235	14.88	12.73	-0.03	0.14	-2.15
1369	714.39	32.28426426	-103.84491046	14.02	11.33	-0.03	0.15	-2.70
1370	714.92	32.28426424	-103.84490539	14.41	12.42	-0.04	0.16	-1.99
1371	715.44	32.28426421	-103.84489986	14.88	14.30	-0.03	0.19	-0.59
1372	715.96	32.28426466	-103.84489340	14.88	13.63	-0.04	0.22	-1.25
1373	716.49	32.28426512	-103.84488686	15.00	12.23	-0.03	0.16	-2.77
1374	717.01	32.28426552	-103.84488055	15.35	12.27	-0.03	0.16	-3.09
1375	717.53	32.28426586	-103.84487411	13.87	11.88	-0.02	0.14	-1.99
1376	718.05	32.28426587	-103.84486712	14.77	13.09	-0.02	0.17	-1.68
1377	718.57	32.28426587	-103.84486005	15.12	10.98	-0.04	0.22	-4.14
1378	719.10	32.28426580	-103.84485267	15.82	12.19	-0.02	0.20	-3.63
1379	719.62	32.28426567	-103.84484551	15.66	14.18	-0.04	0.20	-1.48
1380	720.14	32.28426541	-103.84483886	15.70	16.76	-0.02	0.21	1.06
1381	720.66	32.28426528	-103.84483215	15.04	15.78	-0.02	0.23	0.74
1382	721.19	32.28426537	-103.84482542	15.66	16.64	-0.04	0.18	0.98
1383	721.71	32.28426554	-103.84481888	14.73	14.26	-0.02	0.20	-0.47
1384	722.23	32.28426579	-103.84481250	16.29	16.99	-0.04	0.19	0.70
1385	722.75	32.28426606	-103.84480616	15.12	14.10	-0.02	0.17	-1.02
1386	723.27	32.28426636	-103.84479986	14.92	13.95	-0.04	0.16	-0.98

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1387	723.79	32.28426642	-103.84479310	16.06	18.32	-0.03	0.19	2.27
1388	724.32	32.28426636	-103.84478610	22.19	23.63	-0.03	0.15	1.45
1389	724.84	32.28426623	-103.84477947	26.52	24.41	-0.04	0.10	-2.11
1390	725.36	32.28426608	-103.84477299	-0.43	-16.17	-0.34	-0.02	-15.74
1391	725.88	32.28426597	-103.84476660	22.11	-46.68	-0.68	-1.20	-68.79
1392	726.41	32.28426586	-103.84476023	178.13	-24.45	-0.08	-0.09	-202.58
1393	726.92	32.28426617	-103.84475411	191.64	32.34	-0.07	0.15	-159.30
1394	727.43	32.28426653	-103.84474801	131.21	20.90	-0.03	0.20	-110.31
1395	727.96	32.28426684	-103.84474200	109.81	52.66	-0.03	0.16	-57.15
1396	728.50	32.28426710	-103.84473601	107.11	56.13	-0.05	0.09	-50.98
1397	729.02	32.28426688	-103.84473023	140.27	34.38	-0.06	0.02	-105.90
1398	729.54	32.28426664	-103.84472438	184.69	42.15	-0.06	0.12	-142.54
1399	730.06	32.28426638	-103.84471821	233.71	70.82	-0.04	0.06	-162.89
1400	730.58	32.28426621	-103.84471198	258.87	121.13	-0.05	0.05	-137.73
1401	731.11	32.28426635	-103.84470558	235.23	106.84	-0.03	0.14	-128.40
1402	731.63	32.28426659	-103.84469923	174.45	50.70	-0.04	0.09	-123.75
1403	732.15	32.28426705	-103.84469298	69.96	-3.52	-0.03	0.06	-73.48
1404	732.67	32.28426755	-103.84468681	39.45	10.20	-0.02	-0.02	-29.26
1405	733.20	32.28426809	-103.84468074	24.57	17.81	-0.05	-0.04	-6.76
1406	733.72	32.28426844	-103.84467449	13.71	5.70	-0.03	-0.16	-8.01
1407	734.24	32.28426861	-103.84466804	15.43	6.64	-0.01	-0.19	-8.79
1408	734.76	32.28426859	-103.84466177	16.60	1.48	-0.06	-0.43	-15.12
1409	735.28	32.28426844	-103.84465561	16.52	1.21	-0.02	-0.49	-15.31
1410	735.80	32.28426824	-103.84464987	17.89	0.35	-0.07	-0.63	-17.54
1411	736.33	32.28426801	-103.84464427	23.63	-3.20	-0.05	-0.83	-26.84
1412	736.85	32.28426884	-103.84463942	49.61	-23.36	-0.06	-0.84	-72.97
1413	737.37	32.28427002	-103.84463478	84.96	-16.37	-0.04	-0.82	-101.33
1414	737.89	32.28427316	-103.84463134	92.42	-20.20	-0.05	-0.98	-112.62
1415	738.42	32.28427671	-103.84462812	114.38	26.33	0.02	-0.13	-88.05
1416	738.94	32.28428106	-103.84462686	93.52	51.60	0.03	0.35	-41.91
1417	739.46	32.28428548	-103.84462579	81.17	38.09	0.07	0.25	-43.09
1418	739.98	32.28428874	-103.84462729	75.82	21.09	0.02	-0.18	-54.73
1419	740.50	32.28429199	-103.84462898	88.59	9.57	0.05	-0.57	-79.02
1420	741.03	32.28429498	-103.84463261	134.14	23.32	0.02	-0.38	-110.82
1421	741.55	32.28429759	-103.84463658	152.46	63.09	-0.01	0.09	-89.38
1422	742.07	32.28429849	-103.84464205	139.88	35.47	-0.05	-0.39	-104.41
1423	742.60	32.28429902	-103.84464758	102.77	-4.34	-0.03	-0.83	-107.11
1424	743.12	32.28429852	-103.84465324	36.88	-36.95	-0.10	-0.93	-73.83
1425	743.64	32.28429803	-103.84465898	23.28	-24.22	-0.05	-0.89	-47.50
1426	744.16	32.28429755	-103.84466484	19.18	-6.06	-0.05	-0.71	-25.24
1427	744.68	32.28429722	-103.84467094	10.63	-10.90	0.00	-0.62	-21.52
1428	745.21	32.28429710	-103.84467732	17.19	3.09	0.01	-0.27	-14.10
1429	745.73	32.28429701	-103.84468347	14.10	-2.15	-0.06	-0.45	-16.25
1430	746.25	32.28429695	-103.84468942	16.02	7.93	-0.01	-0.07	-8.09
1431	746.77	32.28429673	-103.84469528	16.25	5.39	-0.03	-0.14	-10.86
1432	747.29	32.28429641	-103.84470109	28.48	19.10	-0.02	-0.09	-9.38
1433	747.82	32.28429593	-103.84470672	31.80	11.80	-0.03	-0.10	-20.00
1434	748.34	32.28429539	-103.84471225	135.86	-28.24	-0.05	-0.05	-164.10
1435	748.86	32.28429486	-103.84471783	239.26	19.88	-0.03	0.04	-219.38
1436	749.38	32.28429432	-103.84472347	280.04	86.02	-0.06	0.07	-194.02
1437	749.91	32.28429405	-103.84472940	292.07	117.81	-0.03	0.04	-174.26
1438	750.43	32.28429382	-103.84473538	297.73	121.17	-0.02	0.10	-176.56
1439	750.95	32.28429352	-103.84474179	269.81	111.45	-0.03	0.15	-158.36
1440	751.47	32.28429320	-103.84474824	275.12	101.41	-0.03	0.14	-173.71
1441	752.00	32.28429267	-103.84475493	268.83	128.01	-0.05	0.21	-140.82
1442	752.52	32.28429213	-103.84476158	297.15	130.12	-0.01	0.25	-167.03
1443	753.04	32.28429152	-103.84476802	305.86	134.65	-0.03	0.29	-171.21
1444	753.56	32.28429096	-103.84477443	295.31	132.23	0.00	0.21	-163.09
1445	754.08	32.28429053	-103.84478057	243.71	88.52	-0.02	0.25	-155.20
1446	754.60	32.28429015	-103.84478684	136.84	21.06	-0.03	0.13	-115.78
1447	755.13	32.28428992	-103.84479337	63.59	8.71	-0.03	0.24	-54.88
1448	755.65	32.28428969	-103.84479982	41.72	37.31	-0.04	0.15	-4.41
1449	756.17	32.28428947	-103.84480594	30.78	41.29	-0.03	0.19	10.51
1450	756.69	32.28428939	-103.84481217	23.56	30.31	-0.02	0.21	6.76
1451	757.22	32.28428949	-103.84481845	18.95	24.26	-0.02	0.20	5.31
1452	757.74	32.28428928	-103.84482466	19.88	23.28	-0.01	0.21	3.40
1453	758.26	32.28428880	-103.84483084	19.84	23.71	-0.04	0.15	3.87
1454	758.78	32.28428826	-103.84483707	23.01	27.77	-0.04	0.12	4.77
1455	759.31	32.28428769	-103.84484335	16.56	17.03	-0.05	0.23	0.47
1456	759.83	32.28428734	-103.84484985	14.92	2.42	-0.02	0.32	-12.50
1457	760.35	32.28428707	-103.84485643	16.33	12.73	-0.02	0.24	-3.59
1458	760.87	32.28428719	-103.84486244	16.21	17.19	-0.02	0.19	0.98
1459	761.39	32.28428741	-103.84486831	15.66	15.63	-0.02	0.22	-0.04
1460	761.92	32.28428773	-103.84487440	15.35	14.96	-0.05	0.20	-0.39
1461	762.44	32.28428805	-103.84488053	14.73	14.10	-0.02	0.16	-0.63
1462	762.96	32.28428776	-103.84488607	15.00	14.26	-0.02	0.18	-0.74
1463	763.48	32.28428745	-103.84489164	15.35	15.23	-0.03	0.21	-0.12

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1464	764.01	32.28428717	-103.84489772	15.66	13.67	-0.03	0.23	-1.99
1465	764.53	32.28428691	-103.84490383	14.53	12.70	-0.04	0.23	-1.84
1466	765.05	32.28428673	-103.84491017	14.26	12.89	0.00	0.23	-1.37
1467	765.57	32.28428662	-103.84491645	14.45	13.28	-0.03	0.18	-1.17
1468	766.09	32.28428676	-103.84492249	13.24	11.68	-0.02	0.21	-1.56
1469	766.62	32.28428661	-103.84492841	14.10	13.01	-0.01	0.22	-1.09
1470	767.14	32.28428582	-103.84493403	14.14	12.27	-0.04	0.22	-1.88
1471	767.66	32.28428477	-103.84493881	14.38	13.16	-0.03	0.23	-1.21
1472	768.18	32.28428332	-103.84494224	14.18	13.40	-0.05	0.20	-0.78
1473	768.70	32.28428343	-103.84494532	13.71	12.38	-0.04	0.20	-1.33
1474	769.23	32.28428528	-103.84494801	14.38	13.56	-0.02	0.20	-0.82
1475	769.75	32.28428823	-103.84494921	13.95	12.15	-0.03	0.23	-1.80
1476	770.27	32.28429206	-103.84494923	13.28	12.66	-0.01	0.23	-0.63
1477	770.79	32.28429616	-103.84494905	13.79	12.07	-0.02	0.25	-1.72
1478	771.31	32.28430043	-103.84494877	13.28	12.58	-0.02	0.20	-0.70
1479	771.84	32.28430430	-103.84494835	13.44	11.80	-0.01	0.21	-1.64
1480	772.36	32.28430803	-103.84494789	13.40	11.76	-0.04	0.22	-1.64
1481	772.89	32.28431037	-103.84494478	14.18	12.15	-0.05	0.20	-2.03
1482	773.41	32.28431229	-103.84494122	13.87	11.95	-0.03	0.21	-1.91
1483	773.92	32.28431288	-103.84493612	12.97	11.17	-0.04	0.21	-1.80
1484	774.43	32.28431331	-103.84493084	12.34	12.97	-0.01	0.23	0.63
1485	774.96	32.28431340	-103.84492482	12.93	12.19	-0.01	0.23	-0.74
1486	775.49	32.28431345	-103.84491874	13.91	12.97	0.00	0.23	-0.94
1487	776.01	32.28431318	-103.84491251	14.77	12.19	-0.01	0.29	-2.58
1488	776.54	32.28431289	-103.84490626	14.61	12.27	-0.02	0.26	-2.34
1489	777.06	32.28431254	-103.84490010	16.02	12.70	-0.01	0.28	-3.32
1490	777.58	32.28431216	-103.84489400	14.34	10.98	-0.02	0.26	-3.36
1491	778.11	32.28431165	-103.84488814	14.06	11.41	-0.02	0.22	-2.66
1492	778.63	32.28431124	-103.84488217	15.08	13.52	-0.01	0.22	-1.56
1493	779.15	32.28431102	-103.84487599	14.92	13.59	-0.02	0.19	-1.33
1494	779.67	32.28431103	-103.84487007	15.08	13.98	-0.01	0.22	-1.09
1495	780.19	32.28431138	-103.84486454	15.82	14.45	-0.03	0.26	-1.37
1496	780.72	32.28431156	-103.84485881	18.09	17.23	-0.01	0.25	-0.86
1497	781.24	32.28431156	-103.84485284	21.80	23.20	0.00	0.22	1.41
1498	781.76	32.28431154	-103.84484699	30.04	34.02	-0.03	0.13	3.98
1499	782.28	32.28431151	-103.84484119	38.24	45.39	-0.04	0.05	7.15
1500	782.81	32.28431131	-103.84483542	41.33	42.62	-0.04	0.19	1.29
1501	783.33	32.28431102	-103.84482967	53.05	9.53	-0.01	0.31	-43.52
1502	783.85	32.28431104	-103.84482406	124.41	-11.33	-0.03	0.16	-135.74
1503	784.37	32.28431117	-103.84481846	239.26	16.09	-0.04	0.19	-223.16
1504	784.89	32.28431136	-103.84481249	312.70	70.82	-0.03	0.22	-241.88
1505	785.42	32.28431157	-103.84480646	346.80	114.57	-0.04	0.20	-232.23
1506	785.94	32.28431168	-103.84480026	364.69	151.02	0.03	0.30	-213.67
1507	786.46	32.28431178	-103.84479404	386.09	183.67	0.01	0.37	-202.42
1508	786.98	32.28431124	-103.84478830	372.66	180.31	0.00	0.34	-192.34
1509	787.51	32.28431072	-103.84478256	402.03	188.09	0.00	0.42	-213.95
1510	788.03	32.28431035	-103.84477685	395.94	211.45	-0.02	0.28	-184.49
1511	788.55	32.28431010	-103.84477118	386.25	199.38	-0.01	0.29	-186.88
1512	789.07	32.28431038	-103.84476571	382.50	167.38	-0.02	0.28	-215.12
1513	789.60	32.28431060	-103.84476006	361.88	151.33	0.00	0.24	-210.55
1514	790.12	32.28431065	-103.84475394	343.95	132.07	-0.03	0.08	-211.88
1515	790.64	32.28431072	-103.84474786	284.14	110.12	-0.04	0.18	-174.02
1516	791.16	32.28431083	-103.84474193	238.75	60.35	-0.02	0.16	-178.40
1517	791.69	32.28431079	-103.84473567	212.42	32.77	-0.02	0.09	-179.65
1518	792.21	32.28431058	-103.84472933	179.26	27.50	0.00	0.25	-151.76
1519	792.73	32.28431069	-103.84472325	111.48	-1.13	-0.01	0.09	-112.62
1520	793.25	32.28431112	-103.84471748	39.92	-8.09	-0.03	0.18	-48.01
1521	793.77	32.28431162	-103.84471147	27.34	14.14	-0.04	-0.02	-13.20
1522	794.30	32.28431216	-103.84470531	17.54	14.96	-0.03	0.03	-2.58
1523	794.83	32.28431242	-103.84469881	17.27	11.17	-0.02	-0.05	-6.09
1524	795.34	32.28431254	-103.84469241	16.09	10.94	0.00	-0.01	-5.16
1525	795.86	32.28431230	-103.84468613	9.84	1.21	-0.04	-0.21	-8.63
1526	796.38	32.28431195	-103.84467989	11.84	4.26	-0.05	-0.34	-7.58
1527	796.91	32.28431143	-103.84467372	18.40	8.36	-0.05	-0.32	-10.04
1528	797.43	32.28431086	-103.84466756	23.44	12.50	-0.07	-0.45	-10.94
1529	797.95	32.28431094	-103.84466183	25.43	-1.29	-0.01	-0.37	-26.72
1530	798.47	32.28431107	-103.84465610	81.68	-29.10	0.01	-0.43	-110.78
1531	798.99	32.28431159	-103.84465057	106.80	-10.70	-0.05	-0.63	-117.50
1532	799.52	32.28431228	-103.84464510	110.00	1.68	-0.03	-0.75	-108.32
1533	800.04	32.28431438	-103.84464024	104.88	13.87	-0.02	-0.78	-91.02
1534	800.57	32.28431689	-103.84463580	105.43	43.52	0.04	-0.50	-61.91
1535	801.08	32.28432082	-103.84463329	97.07	56.76	0.07	0.20	-40.31
1536	801.61	32.28432480	-103.84463152	101.06	53.48	0.05	0.27	-47.58
1537	802.13	32.28432879	-103.84463170	102.66	36.56	0.01	-0.47	-66.09
1538	802.65	32.28433274	-103.84463268	130.90	28.79	0.05	-0.31	-102.11
1539	803.17	32.28433660	-103.84463509	165.47	-3.87	-0.01	-0.97	-169.34
1540	803.69	32.28433986	-103.84463813	207.03	24.34	-0.01	-0.85	-182.70

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1541	804.22	32.28434236	-103.84464198	204.57	77.58	-0.06	-0.19	-126.99
1542	804.74	32.28434412	-103.84464638	211.02	37.97	-0.07	-0.97	-173.05
1543	805.26	32.28434524	-103.84465126	214.57	37.66	-0.04	-0.96	-176.91
1544	805.78	32.28434582	-103.84465652	220.20	46.76	-0.06	-1.10	-173.44
1545	806.31	32.28434606	-103.84466200	187.42	20.16	-0.04	-0.93	-167.27
1546	806.83	32.28434608	-103.84466813	69.57	-46.72	-0.01	-0.70	-116.29
1547	807.35	32.28434599	-103.84467456	48.13	-27.31	-0.03	-0.69	-75.43
1548	807.87	32.28434590	-103.84468072	28.16	4.57	-0.03	-0.52	-23.59
1549	808.39	32.28434581	-103.84468683	21.80	8.63	-0.02	-0.35	-13.16
1550	808.91	32.28434586	-103.84469259	15.63	4.26	-0.03	-0.17	-11.37
1551	809.44	32.28434594	-103.84469832	15.66	6.33	-0.03	-0.25	-9.34
1552	809.96	32.28434566	-103.84470271	13.36	1.80	-0.04	-0.19	-11.56
1553	810.48	32.28434540	-103.84470690	14.92	7.50	-0.03	-0.01	-7.42
1554	811.00	32.28434591	-103.84470818	11.45	2.31	-0.04	-0.03	-9.14
1555	811.53	32.28434634	-103.84470940	10.82	4.88	-0.03	0.05	-5.94
1556	812.05	32.28434625	-103.84471025	12.11	4.69	-0.04	0.03	-7.42
1557	812.57	32.28434609	-103.84471168	13.71	4.81	-0.03	-0.02	-8.91
1558	813.09	32.28434566	-103.84471511	15.27	8.75	0.01	0.05	-6.52
1559	813.62	32.28434563	-103.84471785	12.54	7.46	-0.02	0.07	-5.08
1560	814.14	32.28434654	-103.84471894	11.09	8.24	-0.04	0.02	-2.85
1561	814.67	32.28434711	-103.84471964	13.44	10.00	-0.06	-0.04	-3.44
1562	815.18	32.28434713	-103.84471971	12.70	8.05	-0.03	0.01	-4.65
1563	815.70	32.28434715	-103.84471965	12.85	8.13	-0.02	0.10	-4.73
1564	816.23	32.28434717	-103.84471944	15.23	9.30	-0.04	-0.02	-5.94
1565	816.75	32.28434720	-103.84471930	13.59	7.81	-0.03	0.08	-5.78
1566	817.27	32.28434723	-103.84471921	13.44	7.89	-0.03	0.02	-5.55
1567	817.79	32.28434729	-103.84471926	12.42	6.91	-0.02	0.05	-5.51
1568	818.32	32.28434737	-103.84471937	12.15	6.72	-0.03	0.04	-5.43
1569	818.84	32.28434740	-103.84471951	12.34	7.34	-0.03	0.08	-5.00
1570	819.36	32.28434741	-103.84471965	11.25	5.31	-0.04	-0.03	-5.94
1571	819.88	32.28434738	-103.84471978	12.62	6.99	-0.03	0.01	-5.63
1572	820.41	32.28434734	-103.84471991	13.09	7.66	-0.03	-0.06	-5.43
1573	820.92	32.28434731	-103.84471992	13.91	7.77	-0.04	0.00	-6.13
1574	821.43	32.28434727	-103.84471992	14.14	8.44	-0.03	0.03	-5.70
1575	821.96	32.28434724	-103.84471976	12.03	7.89	-0.03	-0.07	-4.14
1576	822.49	32.28434722	-103.84471963	12.81	7.42	-0.03	0.06	-5.39
1577	823.02	32.28434726	-103.84472004	14.92	9.69	-0.02	-0.09	-5.23
1578	823.54	32.28434710	-103.84472096	13.40	11.13	-0.03	0.05	-2.27
1579	824.06	32.28434588	-103.84472466	12.38	4.49	-0.02	-0.03	-7.89
1580	824.58	32.28434505	-103.84472901	13.79	9.92	-0.04	-0.05	-3.87
1581	825.10	32.28434545	-103.84473544	14.81	11.13	-0.02	0.11	-3.67
1582	825.63	32.28434579	-103.84474203	14.34	11.64	-0.05	0.08	-2.70
1583	826.15	32.28434598	-103.84474892	14.57	14.53	-0.05	0.09	-0.04
1584	826.67	32.28434615	-103.84475572	15.82	15.82	-0.02	0.21	0.00
1585	827.19	32.28434632	-103.84476243	19.14	19.92	0.00	0.21	0.78
1586	827.72	32.28434633	-103.84476896	25.12	28.13	0.02	0.17	3.01
1587	828.24	32.28434618	-103.84477535	34.14	36.33	0.00	0.22	2.19
1588	828.76	32.28434607	-103.84478148	58.75	38.52	0.00	0.21	-20.23
1589	829.28	32.28434598	-103.84478746	90.04	34.30	-0.02	0.22	-55.74
1590	829.80	32.28434595	-103.84479363	146.33	48.09	-0.02	0.24	-98.24
1591	830.33	32.28434596	-103.84479993	218.87	104.38	-0.03	0.27	-114.49
1592	830.85	32.28434632	-103.84480657	267.81	126.17	-0.01	0.21	-141.64
1593	831.37	32.28434681	-103.84481333	330.04	132.07	0.00	0.24	-197.97
1594	831.89	32.28434751	-103.84481960	347.66	181.25	-0.03	0.32	-166.41
1595	832.42	32.28434827	-103.84482578	351.25	204.73	-0.02	0.36	-146.52
1596	832.94	32.28434891	-103.84483203	317.15	182.62	-0.03	0.31	-134.53
1597	833.46	32.28434954	-103.84483829	315.08	184.14	-0.01	0.36	-130.94
1598	833.98	32.28434947	-103.84484424	286.37	176.68	-0.02	0.31	-109.69
1599	834.51	32.28434940	-103.84485027	239.81	106.48	-0.01	0.29	-133.32
1600	835.03	32.28434928	-103.84485689	166.09	38.36	0.02	0.28	-127.74
1601	835.55	32.28434918	-103.84486357	74.14	4.57	-0.01	0.22	-69.57
1602	836.07	32.28434922	-103.84487049	38.71	17.58	-0.02	0.26	-21.13
1603	836.60	32.28434918	-103.84487733	25.04	26.68	-0.03	0.23	1.64
1604	837.12	32.28434892	-103.84488385	19.18	21.72	0.01	0.20	2.54
1605	837.64	32.28434877	-103.84488902	15.35	15.27	-0.01	0.21	-0.08
1606	838.16	32.28434884	-103.84489643	14.84	15.59	0.00	0.22	0.74
1607	838.68	32.28434887	-103.84490242	15.08	15.04	-0.02	0.23	-0.04
1608	839.21	32.28434886	-103.84490815	14.84	15.98	-0.03	0.29	1.13
1609	839.73	32.28434896	-103.84491396	13.59	12.58	0.01	0.23	-1.02
1610	840.25	32.28434917	-103.84491982	14.22	12.77	-0.02	0.21	-1.45
1611	840.77	32.28434927	-103.84492576	15.12	14.65	-0.03	0.21	-0.47
1612	841.29	32.28434929	-103.84493165	15.08	15.43	-0.02	0.23	0.35
1613	841.81	32.28434928	-103.84493622	14.34	12.81	-0.03	0.21	-1.52
1614	842.34	32.28434926	-103.84494016	14.45	14.49	0.00	0.23	0.04
1615	842.86	32.28434951	-103.84494157	14.26	14.41	-0.03	0.17	0.16
1616	843.38	32.28434984	-103.84494220	14.22	13.71	-0.04	0.17	-0.51
1617	843.90	32.28435011	-103.84494222	13.67	13.01	-0.02	0.18	-0.66

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1618	844.43	32.28435038	-103.84494212	13.75	12.46	-0.04	0.16	-1.29
1619	844.95	32.28435064	-103.84494173	14.22	13.83	-0.01	0.19	-0.39
1620	845.47	32.28435090	-103.84494132	14.14	13.44	-0.03	0.19	-0.70
1621	845.99	32.28435096	-103.84494119	14.38	13.67	-0.01	0.17	-0.70
1622	846.51	32.28435103	-103.84494108	14.02	13.40	-0.02	0.22	-0.63
1623	847.04	32.28435103	-103.84494107	13.75	13.52	-0.02	0.21	-0.23
1624	847.56	32.28435102	-103.84494127	14.02	13.01	-0.02	0.21	-1.02
1625	848.08	32.28435097	-103.84494225	14.49	12.58	-0.03	0.20	-1.91
1626	848.60	32.28435063	-103.84494379	15.20	13.24	-0.02	0.21	-1.95
1627	849.13	32.28434955	-103.84494676	14.57	13.75	-0.03	0.18	-0.82
1628	849.65	32.28434981	-103.84494965	14.77	13.79	-0.03	0.19	-0.98
1629	850.17	32.28435243	-103.84495244	14.61	13.13	-0.01	0.20	-1.48
1630	850.69	32.28435577	-103.84495419	14.73	13.13	-0.02	0.21	-1.60
1631	851.22	32.28436002	-103.84495469	14.69	13.95	0.01	0.26	-0.74
1632	851.74	32.28436365	-103.84495383	15.70	14.30	-0.05	0.22	-1.41
1633	852.26	32.28436674	-103.84495177	15.78	13.98	-0.04	0.19	-1.80
1634	852.78	32.28436905	-103.84494827	16.52	13.52	-0.03	0.20	-3.01
1635	853.30	32.28437088	-103.84494385	16.06	14.45	-0.03	0.21	-1.60
1636	853.83	32.28437167	-103.84493829	16.29	14.49	-0.03	0.21	-1.80
1637	854.35	32.28437200	-103.84493223	16.45	15.63	-0.03	0.27	-0.82
1638	854.87	32.28437175	-103.84492593	16.17	15.66	-0.01	0.24	-0.51
1639	855.39	32.28437133	-103.84491952	16.84	16.60	-0.01	0.26	-0.23
1640	855.91	32.28437105	-103.84491322	16.21	16.56	-0.02	0.21	0.35
1641	856.44	32.28437079	-103.84490693	16.95	15.82	-0.01	0.27	-1.13
1642	856.96	32.28437051	-103.84490070	17.54	18.48	-0.03	0.22	0.94
1643	857.48	32.28437024	-103.84489445	20.39	20.00	-0.02	0.21	-0.39
1644	858.00	32.28437022	-103.84488808	22.23	23.24	-0.03	0.23	1.02
1645	858.53	32.28437020	-103.84488178	27.38	27.77	0.00	0.25	0.39
1646	859.05	32.28437025	-103.84487580	34.69	39.30	0.00	0.28	4.61
1647	859.57	32.28437024	-103.84486971	54.34	58.09	-0.01	0.24	3.75
1648	860.09	32.28437004	-103.84486325	56.52	47.62	-0.02	0.29	-8.91
1649	860.62	32.28436984	-103.84485667	169.92	-8.63	-0.04	0.21	-178.56
1650	861.14	32.28436964	-103.84485031	294.65	49.84	-0.02	0.24	-244.80
1651	861.66	32.28436940	-103.84484389	344.57	132.89	-0.03	0.27	-211.68
1652	862.18	32.28436910	-103.84483756	372.34	173.05	0.00	0.37	-199.30
1653	862.70	32.28436893	-103.84483138	377.15	179.61	0.00	0.37	-197.54
1654	863.22	32.28436891	-103.84482537	355.51	183.40	-0.01	0.32	-172.11
1655	863.75	32.28436900	-103.84481947	332.31	180.66	-0.01	0.34	-151.64
1656	864.27	32.28436918	-103.84481366	303.24	159.45	-0.03	0.33	-143.79
1657	864.79	32.28436942	-103.84480758	268.48	126.56	0.00	0.25	-141.91
1658	865.32	32.28436970	-103.84480136	226.52	95.70	-0.01	0.26	-130.82
1659	865.84	32.28436990	-103.84479538	177.62	75.43	-0.03	0.19	-102.19
1660	866.36	32.28437007	-103.84478947	148.48	43.75	-0.03	0.18	-104.73
1661	866.88	32.28437048	-103.84478329	84.61	19.81	-0.02	0.18	-64.80
1662	867.41	32.28437095	-103.84477705	38.40	13.44	-0.01	0.19	-24.96
1663	867.92	32.28437156	-103.84477135	24.41	17.03	0.00	0.18	-7.38
1664	868.43	32.28437219	-103.84476567	19.22	15.63	-0.02	0.14	-3.59
1665	868.96	32.28437246	-103.84475950	17.62	14.92	-0.02	0.16	-2.70
1666	869.49	32.28437271	-103.84475329	15.82	12.93	-0.04	0.15	-2.89
1667	870.01	32.28437287	-103.84474739	16.29	16.64	0.01	0.24	0.35
1668	870.54	32.28437303	-103.84474149	16.02	12.38	0.01	0.22	-3.63
1669	871.06	32.28437323	-103.84473568	17.07	15.74	-0.02	0.10	-1.33
1670	871.58	32.28437350	-103.84472996	16.33	15.59	-0.03	0.02	-0.74
1671	872.10	32.28437397	-103.84472463	17.81	17.42	-0.04	0.09	-0.39
1672	872.63	32.28437443	-103.84471914	16.80	10.39	0.00	0.04	-6.41
1673	873.15	32.28437490	-103.84471330	20.82	14.69	-0.01	0.02	-6.13
1674	873.67	32.28437524	-103.84470723	26.13	19.69	-0.02	0.09	-6.45
1675	874.19	32.28437541	-103.84470081	46.02	37.42	-0.01	0.06	-8.59
1676	874.72	32.28437553	-103.84469457	77.93	-8.48	-0.07	-0.31	-86.41
1677	875.24	32.28437558	-103.84468853	197.03	-14.38	-0.06	-0.30	-211.41
1678	875.76	32.28437579	-103.84468252	219.14	28.98	-0.01	-0.14	-190.16
1679	876.28	32.28437612	-103.84467652	128.20	4.06	-0.04	-0.50	-124.14
1680	876.80	32.28437647	-103.84467088	89.53	6.21	-0.03	-0.57	-83.32
1681	877.33	32.28437682	-103.84466540	65.23	45.59	-0.03	-0.52	-19.65
1682	877.85	32.28437705	-103.84465946	58.44	37.54	-0.06	-0.83	-20.90
1683	878.37	32.28437725	-103.84465335	43.98	14.49	-0.09	-0.91	-29.49
1684	878.89	32.28437936	-103.84464817	40.63	1.80	-0.08	-0.85	-38.83
1685	879.42	32.28438187	-103.84464316	50.82	2.03	-0.04	-0.93	-48.79
1686	879.94	32.28438609	-103.84464140	58.40	7.42	-0.03	-0.72	-50.98
1687	880.46	32.28439048	-103.84463994	51.45	4.22	-0.10	-1.20	-47.23
1688	880.98	32.28439484	-103.84464058	44.96	5.20	-0.02	-0.90	-39.77
1689	881.51	32.28439912	-103.84464148	32.81	19.77	0.01	-0.44	-13.05
1690	882.03	32.28440243	-103.84464506	20.66	42.54	-0.01	0.11	21.88
1691	882.55	32.28440525	-103.84464900	10.78	12.97	-0.09	-0.31	2.19
1692	883.07	32.28440564	-103.84465460	2.19	-25.43	-0.11	-1.03	-27.62
1693	883.60	32.28440569	-103.84466011	4.92	-38.20	-0.18	-1.67	-43.13
1694	884.11	32.28440481	-103.84466532	13.59	-22.07	-0.16	-1.40	-35.66

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1695	884.64	32.28440401	-103.84467080	19.30	-17.77	-0.10	-1.19	-37.07
1696	885.16	32.28440341	-103.84467674	37.03	-13.79	-0.04	-0.78	-50.82
1697	885.68	32.28440303	-103.84468275	124.73	-21.84	-0.08	-0.92	-146.56
1698	886.20	32.28440297	-103.84468891	206.84	20.12	-0.04	-0.56	-186.72
1699	886.73	32.28440291	-103.84469507	223.87	46.76	-0.05	-0.37	-177.11
1700	887.25	32.28440284	-103.84470122	237.34	51.45	0.01	-0.12	-185.90
1701	887.78	32.28440252	-103.84470726	137.50	-2.31	0.00	-0.14	-139.81
1702	888.29	32.28440204	-103.84471303	60.39	-9.69	0.02	0.05	-70.08
1703	888.81	32.28440143	-103.84471871	38.59	18.09	-0.01	0.04	-20.51
1704	889.34	32.28440076	-103.84472433	24.02	21.72	-0.03	-0.05	-2.30
1705	889.86	32.28440065	-103.84473064	18.05	16.21	0.01	0.10	-1.84
1706	890.38	32.28440071	-103.84473716	16.84	12.46	-0.01	0.12	-4.38
1707	890.90	32.28440078	-103.84474331	16.91	15.74	-0.01	0.09	-1.17
1708	891.42	32.28440086	-103.84474942	14.65	12.85	-0.01	0.10	-1.80
1709	891.95	32.28440075	-103.84475546	12.97	10.00	-0.01	0.20	-2.97
1710	892.47	32.28440063	-103.84476151	15.55	12.31	0.01	0.18	-3.24
1711	892.99	32.28440046	-103.84476771	14.38	13.59	-0.03	0.16	-0.78
1712	893.52	32.28440023	-103.84477389	14.49	11.48	0.04	0.22	-3.01
1713	894.04	32.28439963	-103.84478000	15.08	13.48	0.01	0.14	-1.60
1714	894.56	32.28439905	-103.84478622	14.53	14.41	0.00	0.20	-0.12
1715	895.08	32.28439860	-103.84479279	16.17	15.94	0.00	0.21	-0.23
1716	895.60	32.28439818	-103.84479940	18.87	20.16	-0.01	0.27	1.29
1717	896.13	32.28439787	-103.84480595	28.20	29.88	0.00	0.24	1.68
1718	896.65	32.28439766	-103.84481244	30.23	12.38	0.00	0.22	-17.85
1719	897.17	32.28439764	-103.84481887	155.66	-29.53	0.00	0.22	-185.20
1720	897.69	32.28439753	-103.84482525	258.28	50.12	-0.02	0.32	-208.16
1721	898.21	32.28439733	-103.84483150	291.76	113.40	-0.02	0.31	-178.36
1722	898.74	32.28439687	-103.84483745	330.70	147.73	0.00	0.35	-182.97
1723	899.26	32.28439619	-103.84484312	328.44	173.48	-0.02	0.33	-154.96
1724	899.78	32.28439566	-103.84484940	361.80	189.34	0.02	0.33	-172.46
1725	900.30	32.28439521	-103.84485606	367.46	197.89	0.01	0.38	-169.57
1726	900.83	32.28439454	-103.84486226	353.79	189.61	-0.01	0.32	-164.18
1727	901.35	32.28439377	-103.84486827	357.03	171.80	-0.02	0.33	-185.23
1728	901.87	32.28439335	-103.84487428	325.16	160.16	-0.03	0.31	-165.00
1729	902.39	32.28439304	-103.84488029	295.55	121.41	-0.02	0.27	-174.14
1730	902.92	32.28439242	-103.84488619	183.79	36.48	0.00	0.27	-147.31
1731	903.44	32.28439177	-103.84489206	80.98	-7.81	0.00	0.27	-88.79
1732	903.96	32.28439109	-103.84489826	51.88	39.22	0.01	0.25	-12.66
1733	904.48	32.28439042	-103.84490450	33.13	42.19	-0.01	0.26	9.06
1734	905.00	32.28438982	-103.84491104	24.41	32.23	0.00	0.25	7.81
1735	905.53	32.28438929	-103.84491759	21.02	26.29	-0.01	0.25	5.27
1736	906.05	32.28438915	-103.84492403	18.67	21.56	0.02	0.23	2.89
1737	906.57	32.28438906	-103.84493045	18.32	19.69	0.01	0.24	1.37
1738	907.09	32.28438920	-103.84493682	16.56	17.50	0.01	0.21	0.94
1739	907.62	32.28438915	-103.84494309	16.48	18.05	0.02	0.28	1.56
1740	908.14	32.28438867	-103.84494916	17.15	17.70	-0.01	0.23	0.55
1741	908.66	32.28438819	-103.84495526	16.68	17.27	0.02	0.25	0.59
1742	909.18	32.28438771	-103.84496139	16.72	16.84	0.00	0.24	0.12
1743	909.70	32.28438718	-103.84496770	15.59	15.74	0.02	0.24	0.16
1744	910.23	32.28438660	-103.84497422	16.41	16.52	0.01	0.25	0.12
1745	910.75	32.28438622	-103.84498053	16.29	15.23	-0.01	0.25	-1.06
1746	911.27	32.28438601	-103.84498674	17.27	15.70	-0.01	0.23	-1.56
1747	911.79	32.28438598	-103.84499296	14.26	14.49	-0.04	0.24	0.23
1748	912.31	32.28438604	-103.84499918	15.20	15.12	0.00	0.24	-0.08
1749	912.83	32.28438602	-103.84500546	15.12	15.78	0.00	0.21	0.66
1750	913.36	32.28438597	-103.84501178	14.22	16.29	0.06	0.26	2.07
1751	913.88	32.28438569	-103.84501785	14.69	15.04	0.04	0.25	0.35
1752	914.40	32.28438535	-103.84502386	14.30	14.41	-0.01	0.28	0.12
1753	914.92	32.28438505	-103.84502995	16.29	15.27	0.02	0.27	-1.02
1754	915.43	32.28438475	-103.84503607	15.70	14.10	0.00	0.27	-1.60
1755	915.96	32.28438455	-103.84504257	15.98	12.85	0.02	0.29	-3.13
1756	916.49	32.28438437	-103.84504907	16.84	16.13	0.00	0.26	-0.70
1757	917.02	32.28438434	-103.84505539	5.78	14.57	0.08	0.30	8.79
1758	917.54	32.28438428	-103.84506167	12.34	13.67	0.03	0.27	1.33
1759	918.06	32.28438402	-103.84506805	14.22	14.38	-0.02	0.25	0.16
1760	918.58	32.28438371	-103.84507432	14.06	14.84	0.01	0.25	0.78
1761	919.10	32.28438322	-103.84508019	14.30	14.18	0.00	0.24	-0.12
1762	919.63	32.28438284	-103.84508625	13.63	14.18	0.01	0.25	0.55
1763	920.15	32.28438270	-103.84509274	14.18	13.71	0.01	0.24	-0.47
1764	920.67	32.28438257	-103.84509916	13.40	12.70	-0.02	0.25	-0.70
1765	921.19	32.28438243	-103.84510548	13.52	14.30	-0.01	0.25	0.78
1766	921.71	32.28438239	-103.84511168	13.67	13.95	-0.02	0.23	0.27
1767	922.24	32.28438245	-103.84511777	13.24	13.56	0.03	0.29	0.31
1768	922.76	32.28438259	-103.84512407	14.41	14.30	0.01	0.25	-0.12
1769	923.28	32.28438280	-103.84513055	14.30	12.38	-0.01	0.28	-1.91
1770	923.80	32.28438263	-103.84513659	13.98	13.48	-0.01	0.26	-0.51
1771	924.32	32.28438225	-103.84514245	13.95	13.95	-0.03	0.24	0.00

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1772	924.85	32.28438232	-103.84514872	13.52	13.52	0.00	0.26	0.00
1773	925.37	32.28438254	-103.84515512	13.05	13.24	0.01	0.27	0.20
1774	925.89	32.28438278	-103.84516126	12.38	12.19	0.00	0.25	-0.19
1775	926.41	32.28438302	-103.84516738	13.01	13.20	0.00	0.25	0.20
1776	926.94	32.28438315	-103.84517368	13.28	13.32	0.00	0.27	0.04
1777	927.46	32.28438325	-103.84517998	12.89	12.85	0.02	0.26	-0.04
1778	927.98	32.28438337	-103.84518627	13.56	14.84	-0.01	0.25	1.29
1779	928.51	32.28438346	-103.84519258	12.66	13.98	0.04	0.26	1.33
1780	929.03	32.28438328	-103.84519870	13.16	13.28	0.03	0.29	0.12
1781	929.55	32.28438318	-103.84520494	12.66	12.73	0.01	0.26	0.08
1782	930.07	32.28438345	-103.84521159	13.59	13.63	0.01	0.26	0.04
1783	930.59	32.28438376	-103.84521811	13.48	13.52	-0.02	0.24	0.04
1784	931.11	32.28438419	-103.84522426	12.03	12.62	0.01	0.26	0.59
1785	931.64	32.28438453	-103.84523050	11.72	12.42	0.02	0.26	0.70
1786	932.16	32.28438470	-103.84523686	12.77	12.54	0.03	0.27	-0.23
1787	932.68	32.28438460	-103.84524303	6.80	11.56	0.06	0.29	4.77
1788	933.20	32.28438413	-103.84524894	8.98	12.11	0.04	0.30	3.13
1789	933.73	32.28438368	-103.84525475	10.12	11.52	0.06	0.34	1.41
1790	934.25	32.28438325	-103.84526049	11.64	11.41	0.02	0.32	-0.23
1791	934.76	32.28438307	-103.84526565	10.94	11.99	0.04	0.30	1.05
1792	935.28	32.28438307	-103.84527047	12.77	11.25	0.01	0.37	-1.52
1793	935.81	32.28438477	-103.84527419	12.66	13.09	0.01	0.30	0.43
1794	936.34	32.28438728	-103.84527720	12.85	13.87	0.02	0.28	1.02
1795	936.86	32.28439045	-103.84527898	10.82	14.10	0.04	0.33	3.28
1796	937.38	32.28439383	-103.84528040	11.95	13.67	0.01	0.34	1.72
1797	937.91	32.28439753	-103.84528014	13.24	15.20	0.03	0.34	1.95
1798	938.42	32.28440123	-103.84527958	13.44	14.81	0.00	0.29	1.37
1799	938.95	32.28440306	-103.84527521	13.09	13.87	0.01	0.27	0.78
1800	939.47	32.28440473	-103.84527055	13.48	14.65	0.02	0.25	1.17
1801	939.99	32.28440468	-103.84526496	9.92	12.50	0.06	0.28	2.58
1802	940.51	32.28440464	-103.84525934	12.31	12.89	0.01	0.31	0.59
1803	941.04	32.28440464	-103.84525354	13.09	13.24	-0.01	0.28	0.16
1804	941.56	32.28440459	-103.84524768	12.62	12.97	0.01	0.26	0.35
1805	942.08	32.28440428	-103.84524167	12.58	12.97	0.02	0.30	0.39
1806	942.60	32.28440388	-103.84523561	12.42	12.93	-0.01	0.26	0.51
1807	943.12	32.28440319	-103.84522948	12.50	12.93	-0.01	0.23	0.43
1808	943.65	32.28440240	-103.84522356	12.70	12.19	-0.02	0.23	-0.51
1809	944.17	32.28440143	-103.84521803	12.46	12.46	0.00	0.26	0.00
1810	944.69	32.28440062	-103.84521229	13.32	13.36	0.00	0.25	0.04
1811	945.21	32.28440003	-103.84520630	13.52	13.32	-0.01	0.24	-0.20
1812	945.74	32.28439961	-103.84520035	13.09	11.99	-0.01	0.22	-1.09
1813	946.26	32.28439935	-103.84519445	14.10	13.40	-0.02	0.26	-0.70
1814	946.78	32.28439916	-103.84518833	12.58	12.07	0.01	0.25	-0.51
1815	947.30	32.28439902	-103.84518207	13.05	12.77	0.01	0.27	-0.27
1816	947.83	32.28439847	-103.84517596	12.34	12.77	-0.01	0.23	0.43
1817	948.35	32.28439775	-103.84516990	13.48	13.98	0.00	0.25	0.51
1818	948.87	32.28439721	-103.84516377	13.44	13.56	-0.01	0.25	0.12
1819	949.39	32.28439672	-103.84515766	13.32	13.13	0.00	0.24	-0.20
1820	949.91	32.28439667	-103.84515163	13.32	13.36	0.01	0.25	0.04
1821	950.44	32.28439668	-103.84514562	13.44	13.91	0.00	0.28	0.47
1822	950.96	32.28439643	-103.84513947	13.71	14.81	0.00	0.26	1.09
1823	951.48	32.28439616	-103.84513329	13.91	14.49	-0.03	0.22	0.59
1824	952.00	32.28439597	-103.84512687	13.83	15.00	0.02	0.26	1.17
1825	952.52	32.28439572	-103.84512050	14.41	15.43	0.02	0.26	1.02
1826	953.05	32.28439517	-103.84511457	13.83	14.38	-0.01	0.25	0.55
1827	953.57	32.28439463	-103.84510852	14.18	14.34	-0.01	0.24	0.16
1828	954.09	32.28439418	-103.84510216	13.83	15.04	-0.01	0.27	1.21
1829	954.61	32.28439391	-103.84509600	13.52	14.02	0.01	0.27	0.51
1830	955.14	32.28439410	-103.84509044	14.10	14.88	-0.01	0.27	0.78
1831	955.66	32.28439422	-103.84508464	13.91	14.96	0.02	0.25	1.06
1832	956.18	32.28439426	-103.84507848	13.91	13.67	0.02	0.25	-0.23
1833	956.70	32.28439398	-103.84507225	14.73	14.61	-0.03	0.22	-0.12
1834	957.23	32.28439335	-103.84506597	15.27	14.96	-0.03	0.24	-0.31
1835	957.75	32.28439281	-103.84505998	15.66	15.16	-0.02	0.24	-0.51
1836	958.27	32.28439235	-103.84505422	15.16	15.74	0.03	0.23	0.59
1837	958.79	32.28439209	-103.84504824	16.76	16.29	0.01	0.24	-0.47
1838	959.31	32.28439196	-103.84504214	16.06	15.35	0.00	0.26	-0.70
1839	959.84	32.28439211	-103.84503641	15.90	14.14	0.00	0.27	-1.76
1840	960.36	32.28439236	-103.84503082	15.86	14.49	-0.02	0.26	-1.37
1841	960.88	32.28439255	-103.84502495	16.13	15.16	0.00	0.26	-0.98
1842	961.40	32.28439273	-103.84501900	14.73	15.27	-0.01	0.27	0.55
1843	961.92	32.28439286	-103.84501341	14.41	14.65	0.00	0.25	0.23
1844	962.43	32.28439300	-103.84500785	14.61	15.74	0.00	0.29	1.13
1845	962.96	32.28439321	-103.84500215	15.70	15.63	-0.03	0.24	-0.08
1846	963.49	32.28439347	-103.84499645	16.41	15.12	-0.01	0.26	-1.29
1847	964.01	32.28439428	-103.84499124	17.11	15.04	-0.02	0.24	-2.07
1848	964.54	32.28439505	-103.84498594	16.56	15.86	-0.01	0.27	-0.70

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1849	965.06	32.28439562	-103.84498018	17.15	17.50	-0.01	0.27	0.35
1850	965.58	32.28439596	-103.84497425	16.91	18.71	-0.02	0.26	1.80
1851	966.10	32.28439552	-103.84496783	16.60	19.02	-0.01	0.21	2.42
1852	966.63	32.28439493	-103.84496150	17.19	17.70	-0.02	0.23	0.51
1853	967.15	32.28439400	-103.84495538	16.99	17.93	-0.01	0.24	0.94
1854	967.67	32.28439329	-103.84494932	17.19	16.88	0.00	0.23	-0.31
1855	968.19	32.28439293	-103.84494339	17.15	18.79	0.01	0.24	1.64
1856	968.71	32.28439287	-103.84493757	18.01	19.06	0.01	0.26	1.06
1857	969.24	32.28439311	-103.84493181	19.45	20.51	-0.02	0.24	1.06
1858	969.76	32.28439338	-103.84492587	16.80	20.90	0.04	0.27	4.10
1859	970.28	32.28439366	-103.84491981	21.41	24.41	0.00	0.25	3.01
1860	970.80	32.28439374	-103.84491345	24.14	28.91	0.03	0.28	4.77
1861	971.33	32.28439371	-103.84490692	37.07	42.93	0.01	0.26	5.86
1862	971.85	32.28439357	-103.84490117	44.69	50.94	-0.01	0.26	6.25
1863	972.37	32.28439341	-103.84489570	55.04	17.54	-0.01	0.27	-37.50
1864	972.89	32.28439364	-103.84489068	153.40	-26.21	-0.03	0.25	-179.61
1865	973.41	32.28439395	-103.84488575	265.59	11.17	0.00	0.26	-254.41
1866	973.93	32.28439472	-103.84488142	331.45	76.95	-0.01	0.27	-254.49
1867	974.44	32.28439554	-103.84487713	346.72	131.80	-0.02	0.26	-214.92
1868	974.97	32.28439612	-103.84487164	363.56	154.65	0.01	0.31	-208.91
1869	975.50	32.28439668	-103.84486606	377.42	164.65	0.00	0.37	-212.77
1870	976.02	32.28439714	-103.84486066	354.61	187.03	-0.01	0.33	-167.58
1871	976.54	32.28439767	-103.84485508	372.89	198.01	0.00	0.37	-174.88
1872	977.07	32.28439844	-103.84484942	350.90	204.96	-0.02	0.34	-145.94
1873	977.59	32.28439927	-103.84484379	343.24	175.82	0.01	0.32	-167.42
1874	978.11	32.28440028	-103.84483832	326.60	156.37	0.00	0.33	-170.24
1875	978.64	32.28440122	-103.84483255	276.68	119.92	0.01	0.31	-156.76
1876	979.16	32.28440205	-103.84482625	218.40	77.62	0.02	0.31	-140.78
1877	979.68	32.28440283	-103.84482007	106.60	11.60	-0.01	0.23	-95.00
1878	980.20	32.28440355	-103.84481399	38.98	-7.85	0.00	0.30	-46.84
1879	980.73	32.28440436	-103.84480802	25.90	18.32	0.01	0.29	-7.58
1880	981.25	32.28440524	-103.84480230	18.79	21.02	0.01	0.23	2.23
1881	981.77	32.28440611	-103.84479660	16.68	16.64	0.00	0.24	-0.04
1882	982.29	32.28440697	-103.84479105	15.78	14.49	-0.02	0.20	-1.29
1883	982.81	32.28440733	-103.84478521	14.65	13.83	0.01	0.25	-0.82
1884	983.34	32.28440747	-103.84477921	16.13	14.73	0.01	0.23	-1.41
1885	983.86	32.28440732	-103.84477325	13.87	11.91	0.00	0.17	-1.95
1886	984.38	32.28440708	-103.84476732	14.49	12.85	-0.01	0.17	-1.64
1887	984.90	32.28440701	-103.84476156	14.30	12.07	-0.02	0.14	-2.23
1888	985.42	32.28440697	-103.84475581	14.34	12.81	-0.02	0.12	-1.52
1889	985.95	32.28440747	-103.84475002	15.23	11.45	-0.02	0.12	-3.79
1890	986.47	32.28440800	-103.84474422	16.91	14.34	-0.01	0.13	-2.58
1891	986.99	32.28440858	-103.84473835	16.13	14.41	0.02	0.16	-1.72
1892	987.51	32.28440911	-103.84473241	19.26	7.85	0.01	0.20	-11.41
1893	988.04	32.28440915	-103.84472625	-6.88	-11.95	-1.28	-4.91	-5.08
1894	988.56	32.28440913	-103.84472025	-117.73	-57.97	1.06	-0.79	59.77
1895	989.08	32.28440880	-103.84471518	106.48	-101.68	-0.07	-4.46	-208.16
1896	989.60	32.28440857	-103.84471020	208.59	-8.44	-0.02	-1.09	-217.03
1897	990.12	32.28440857	-103.84470553	235.98	51.37	-0.04	-0.34	-184.61
1898	990.65	32.28440875	-103.84470091	229.92	51.84	-0.01	-0.06	-178.09
1899	991.17	32.28440926	-103.84469639	220.43	47.58	0.02	-0.03	-172.85
1900	991.69	32.28440957	-103.84469136	143.59	21.17	0.00	-0.12	-122.42
1901	992.21	32.28440962	-103.84468568	55.43	-21.17	-0.01	-0.28	-76.60
1902	992.74	32.28440971	-103.84467998	38.83	2.85	0.01	-0.24	-35.98
1903	993.26	32.28440984	-103.84467428	18.28	11.68	0.15	-0.45	-6.60
1904	993.78	32.28441004	-103.84466899	14.53	1.37	0.04	-0.57	-13.16
1905	994.30	32.28441028	-103.84466398	15.86	-8.56	-0.07	-0.82	-24.41
1906	994.83	32.28441063	-103.84465835	11.17	-17.34	-0.05	-0.67	-28.52
1907	995.35	32.28441103	-103.84465247	-3.36	-38.87	-0.08	-1.24	-35.51
1908	995.87	32.28441342	-103.84464748	6.91	-37.62	-0.09	-1.37	-44.53
1909	996.39	32.28441635	-103.84464272	27.11	-16.41	0.01	-0.94	-43.52
1910	996.91	32.28442096	-103.84464117	20.78	1.99	-0.05	-0.58	-18.79
1911	997.43	32.28442582	-103.84464010	11.37	-23.24	-0.07	-1.05	-34.61
1912	997.96	32.28443049	-103.84464136	14.06	-36.29	-0.05	-1.55	-50.35
1913	998.48	32.28443511	-103.84464288	21.48	-30.70	-0.01	-1.36	-52.19
1914	999.00	32.28443836	-103.84464763	8.87	-3.71	-0.08	-0.60	-12.58
1915	999.52	32.28444134	-103.84465242	-3.13	-16.13	-0.10	-0.74	-13.01
1916	1,000.05	32.28444264	-103.84465765	-6.37	-33.36	-0.11	-1.17	-26.99
1917	1,000.57	32.28444367	-103.84466306	2.73	-32.93	-0.07	-1.17	-35.66
1918	1,001.09	32.28444371	-103.84466914	3.13	-25.51	-0.08	-1.12	-28.63
1919	1,001.61	32.28444358	-103.84467526	4.14	-24.61	-0.02	-1.00	-28.75
1920	1,002.14	32.28444303	-103.84468144	14.45	-8.95	-0.01	-0.54	-23.40
1921	1,002.66	32.28444257	-103.84468765	29.02	10.35	-0.02	-0.44	-18.67
1922	1,003.18	32.28444223	-103.84469396	24.65	1.13	0.00	-0.29	-23.52
1923	1,003.70	32.28444206	-103.84470006	122.62	-25.90	-0.04	-0.03	-148.52
1924	1,004.23	32.28444208	-103.84470594	193.28	27.50	-0.03	-0.21	-165.78
1925	1,004.75	32.28444232	-103.84471180	192.50	42.97	-0.06	-0.22	-149.53

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
1926	1,005.27	32.28444274	-103.84471767	117.54	-3.24	0.00	0.04	-120.78
1927	1,005.79	32.28444285	-103.84472355	39.30	-31.84	0.02	0.07	-71.13
1928	1,006.31	32.28444278	-103.84472943	24.92	15.04	0.00	0.17	-9.88
1929	1,006.84	32.28444259	-103.84473544	19.57	18.13	0.02	0.16	-1.45
1930	1,007.36	32.28444236	-103.84474151	16.37	15.90	-0.02	0.07	-0.47
1931	1,007.88	32.28444263	-103.84474773	14.53	12.07	0.03	0.22	-2.46
1932	1,008.40	32.28444301	-103.84475403	13.36	12.81	-0.01	0.14	-0.55
1933	1,008.92	32.28444331	-103.84475999	13.91	11.48	0.03	0.21	-2.42
1934	1,009.43	32.28444359	-103.84476593	13.95	12.46	0.02	0.20	-1.48
1935	1,009.96	32.28444378	-103.84477194	11.95	10.82	0.00	0.25	-1.13
1936	1,010.49	32.28444393	-103.84477796	12.27	11.45	0.00	0.19	-0.82
1937	1,011.01	32.28444380	-103.84478395	11.45	9.41	-0.01	0.19	-2.03
1938	1,011.54	32.28444366	-103.84478991	10.16	9.84	0.05	0.23	-0.31
1939	1,012.06	32.28444352	-103.84479558	12.31	11.84	0.03	0.21	-0.47
1940	1,012.58	32.28444342	-103.84480137	12.54	12.46	0.00	0.20	-0.08
1941	1,013.10	32.28444344	-103.84480760	12.73	11.60	0.00	0.19	-1.13
1942	1,013.62	32.28444359	-103.84481370	12.81	12.15	-0.02	0.21	-0.67
1943	1,014.15	32.28444403	-103.84481951	5.08	10.63	0.11	0.28	5.55
1944	1,014.67	32.28444437	-103.84482536	11.29	11.33	0.03	0.32	0.04
1945	1,015.19	32.28444458	-103.84483121	12.38	12.27	0.01	0.28	-0.12
1946	1,015.71	32.28444458	-103.84483683	12.70	13.59	-0.01	0.24	0.90
1947	1,016.24	32.28444437	-103.84484224	12.62	12.54	-0.02	0.25	-0.08
1948	1,016.76	32.28444409	-103.84484776	13.16	14.10	0.00	0.25	0.94
1949	1,017.28	32.28444437	-103.84485334	13.59	14.38	-0.01	0.23	0.78
1950	1,017.80	32.28444361	-103.84485940	13.05	14.22	0.01	0.28	1.17
1951	1,018.32	32.28444357	-103.84486570	15.47	15.66	0.01	0.25	0.20
1952	1,018.85	32.28444388	-103.84487184	17.54	15.31	0.05	0.26	-2.23
1953	1,019.37	32.28444431	-103.84487791	16.68	17.66	0.01	0.18	0.98
1954	1,019.89	32.28444459	-103.84488402	16.68	17.31	0.00	0.22	0.63
1955	1,020.41	32.28444483	-103.84489014	17.31	19.45	0.01	0.26	2.15
1956	1,020.93	32.28444435	-103.84489572	18.59	21.25	0.00	0.27	2.66
1957	1,021.44	32.28444379	-103.84490126	20.74	25.78	0.00	0.28	5.04
1958	1,021.97	32.28444400	-103.84490774	23.05	29.30	0.01	0.30	6.25
1959	1,022.50	32.28444425	-103.84491423	26.09	32.89	-0.01	0.21	6.80
1960	1,023.02	32.28444473	-103.84492065	30.70	39.84	0.00	0.24	9.14
1961	1,023.55	32.28444525	-103.84492694	35.04	46.88	0.01	0.26	11.84
1962	1,024.07	32.28444596	-103.84493263	41.17	56.60	0.00	0.24	15.43
1963	1,024.59	32.28444647	-103.84493838	41.21	59.96	0.00	0.25	18.75
1964	1,025.11	32.28444635	-103.84494429	45.82	61.41	-0.01	0.25	15.59
1965	1,025.64	32.28444617	-103.84495013	57.62	59.96	0.00	0.29	2.34
1966	1,026.16	32.28444586	-103.84495577	76.64	13.79	-0.01	0.26	-62.85
1967	1,026.69	32.28444573	-103.84496173	222.15	-10.16	-0.02	0.22	-232.30
1968	1,027.20	32.28444585	-103.84496778	300.66	56.88	0.00	0.28	-243.79
1969	1,027.72	32.28444614	-103.84497351	323.59	130.20	-0.02	0.29	-193.40
1970	1,028.25	32.28444659	-103.84497882	349.22	164.02	0.00	0.31	-185.20
1971	1,028.77	32.28444705	-103.84498413	321.91	129.34	-0.01	0.32	-192.58
1972	1,029.29	32.28444750	-103.84498944	318.59	105.20	0.01	0.28	-213.40
1973	1,029.81	32.28444781	-103.84499445	286.06	98.79	0.01	0.27	-187.27
1974	1,030.33	32.28444805	-103.84499934	186.72	49.84	-0.02	0.27	-136.88
1975	1,030.86	32.28444863	-103.84500468	136.29	44.45	0.01	0.28	-91.84
1976	1,031.38	32.28444933	-103.84501016	113.09	55.16	0.01	0.30	-57.93
1977	1,031.90	32.28444998	-103.84501532	104.49	55.74	0.01	0.31	-48.75
1978	1,032.42	32.28445062	-103.84502041	127.38	52.15	0.01	0.30	-75.24
1979	1,032.95	32.28445112	-103.84502624	193.63	54.41	-0.01	0.27	-139.22
1980	1,033.47	32.28445159	-103.84503211	280.04	64.96	0.01	0.28	-215.08
1981	1,033.99	32.28445102	-103.84503759	365.59	86.41	0.00	0.32	-279.18
1982	1,034.51	32.28445046	-103.84504313	409.14	143.83	0.00	0.33	-265.31
1983	1,035.04	32.28445002	-103.84504905	454.38	194.49	0.00	0.37	-259.88
1984	1,035.56	32.28444959	-103.84505493	450.12	238.67	-0.01	0.40	-211.45
1985	1,036.08	32.28444916	-103.84506059	461.91	233.36	0.03	0.42	-228.56
1986	1,036.60	32.28444876	-103.84506623	460.43	222.97	0.02	0.43	-237.46
1987	1,037.12	32.28444844	-103.84507185	428.56	230.12	0.00	0.44	-198.44
1988	1,037.65	32.28444801	-103.84507742	418.52	219.38	-0.01	0.38	-199.14
1989	1,038.17	32.28444735	-103.84508289	377.77	199.45	-0.02	0.35	-178.32
1990	1,038.69	32.28444683	-103.84508851	357.62	195.59	-0.01	0.36	-162.03
1991	1,039.21	32.28444648	-103.84509435	326.06	180.98	-0.01	0.34	-145.08
1992	1,039.74	32.28444635	-103.84510052	290.35	145.20	0.01	0.32	-145.16
1993	1,040.26	32.28444642	-103.84510703	177.77	54.45	0.00	0.29	-123.32
1994	1,040.78	32.28444657	-103.84511324	77.11	2.70	-0.02	0.24	-74.41
1995	1,041.30	32.28444676	-103.84511926	55.16	49.65	-0.01	0.25	-5.51
1996	1,041.82	32.28444699	-103.84512512	39.53	58.44	0.00	0.22	18.91
1997	1,042.35	32.28444724	-103.84513092	32.81	48.98	0.01	0.26	16.17
1998	1,042.87	32.28444740	-103.84513682	30.35	41.56	0.00	0.24	11.21
1999	1,043.39	32.28444754	-103.84514279	28.63	37.89	-0.01	0.25	9.26
2000	1,043.91	32.28444762	-103.84514913	27.46	35.70	0.00	0.25	8.24
2001	1,044.43	32.28444769	-103.84515555	28.40	37.38	0.00	0.25	8.99
2002	1,044.95	32.28444791	-103.84516145	31.91	39.92	0.01	0.29	8.01

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2003	1,045.48	32.28444814	-103.84516747	25.35	36.68	0.04	0.29	11.33
2004	1,046.00	32.28444841	-103.84517329	33.09	33.24	-0.01	0.29	0.16
2005	1,046.53	32.28444861	-103.84517909	34.53	33.95	0.01	0.31	-0.59
2006	1,047.05	32.28444837	-103.84518472	60.86	16.56	0.00	0.26	-44.30
2007	1,047.58	32.28444823	-103.84519053	83.44	13.20	0.01	0.30	-70.24
2008	1,048.09	32.28444847	-103.84519650	34.69	7.62	0.02	0.31	-27.07
2009	1,048.61	32.28444866	-103.84520242	28.91	17.81	0.00	0.25	-11.09
2010	1,049.14	32.28444871	-103.84520799	23.36	30.35	0.02	0.31	6.99
2011	1,049.66	32.28444838	-103.84521345	20.63	28.95	-0.02	0.25	8.32
2012	1,050.18	32.28444741	-103.84521877	17.89	24.81	0.00	0.24	6.91
2013	1,050.71	32.28444597	-103.84522373	16.72	21.29	0.01	0.25	4.57
2014	1,051.22	32.28444400	-103.84522821	16.25	19.96	-0.01	0.24	3.71
2015	1,051.74	32.28444203	-103.84523303	15.59	18.75	0.00	0.24	3.16
2016	1,052.27	32.28444003	-103.84523813	15.66	17.93	0.00	0.28	2.27
2017	1,052.79	32.28443819	-103.84524354	15.94	19.57	0.02	0.25	3.63
2018	1,053.31	32.28443643	-103.84524913	16.64	19.96	0.02	0.25	3.32
2019	1,053.83	32.28443501	-103.84525427	16.41	19.84	0.00	0.26	3.44
2020	1,054.36	32.28443372	-103.84525925	17.11	20.94	0.02	0.30	3.83
2021	1,054.88	32.28443230	-103.84526323	16.33	19.38	0.01	0.28	3.05
2022	1,055.40	32.28443085	-103.84526698	15.82	18.91	0.03	0.29	3.09
2023	1,055.92	32.28443105	-103.84527120	15.66	18.24	0.04	0.32	2.58
2024	1,056.43	32.28443145	-103.84527549	18.44	21.33	0.02	0.33	2.89
2025	1,056.96	32.28443252	-103.84528029	19.49	23.40	0.03	0.35	3.91
2026	1,057.49	32.28443342	-103.84528509	18.40	23.95	0.03	0.37	5.55
2027	1,058.01	32.28443100	-103.84528931	16.56	21.52	0.02	0.42	4.96
2028	1,058.54	32.28442829	-103.84529310	15.90	17.62	0.05	0.53	1.72
2029	1,059.06	32.28442390	-103.84529431	15.70	18.87	0.07	0.68	3.16
2030	1,059.58	32.28441952	-103.84529502	15.82	18.71	0.07	0.78	2.89
2031	1,060.10	32.28441512	-103.84529401	15.39	18.87	0.07	0.73	3.48
2032	1,060.62	32.28441141	-103.84529200	15.27	18.40	0.05	0.65	3.13
2033	1,061.15	32.28440923	-103.84528778	12.85	16.76	0.06	0.49	3.91
2034	1,061.67	32.28440897	-103.84528373	13.79	16.25	0.04	0.41	2.46
2035	1,062.19	32.28441155	-103.84527989	13.56	16.09	0.06	0.36	2.54
2036	1,062.71	32.28441522	-103.84527760	13.67	15.66	0.04	0.33	1.99
2037	1,063.23	32.28442006	-103.84527699	13.24	15.23	0.08	0.35	1.99
2038	1,063.76	32.28442471	-103.84527834	14.88	16.88	0.03	0.33	1.99
2039	1,064.28	32.28442922	-103.84528120	16.84	19.92	0.02	0.31	3.09
2040	1,064.80	32.28443273	-103.84528491	18.28	20.12	0.04	0.35	1.84
2041	1,065.32	32.28443571	-103.84528906	19.69	22.07	0.02	0.38	2.38
2042	1,065.85	32.28443853	-103.84529336	20.51	25.66	0.04	0.42	5.16
2043	1,066.37	32.28444131	-103.84529772	22.19	27.73	0.04	0.50	5.55
2044	1,066.89	32.28444458	-103.84530188	24.02	29.10	0.06	0.54	5.08
2045	1,067.41	32.28444796	-103.84530599	23.75	29.77	0.06	0.57	6.02
2046	1,067.92	32.28445199	-103.84530942	21.84	29.14	0.05	0.57	7.31
2047	1,068.44	32.28445609	-103.84531278	21.37	29.02	0.05	0.56	7.66
2048	1,068.97	32.28446044	-103.84531606	20.47	25.86	0.02	0.45	5.39
2049	1,069.50	32.28446486	-103.84531927	19.57	23.67	0.05	0.37	4.10
2050	1,070.02	32.28446941	-103.84532148	20.78	23.79	0.04	0.38	3.01
2051	1,070.55	32.28447415	-103.84532345	20.39	21.64	0.04	0.37	1.25
2052	1,071.07	32.28447972	-103.84532415	21.99	22.46	0.05	0.32	0.47
2053	1,071.59	32.28448535	-103.84532465	21.88	23.20	0.02	0.30	1.33
2054	1,072.11	32.28449108	-103.84532450	20.86	21.64	0.04	0.31	0.78
2055	1,072.64	32.28449686	-103.84532414	22.03	23.09	0.02	0.29	1.06
2056	1,073.16	32.28450268	-103.84532340	22.27	25.47	0.09	0.33	3.20
2057	1,073.68	32.28450858	-103.84532291	23.16	26.33	0.06	0.28	3.16
2058	1,074.20	32.28451457	-103.84532276	24.49	25.00	0.07	0.33	0.51
2059	1,074.72	32.28452012	-103.84532288	29.53	28.13	0.06	0.34	-1.41
2060	1,075.25	32.28452523	-103.84532325	32.15	27.19	0.02	0.29	-4.96
2061	1,075.77	32.28453001	-103.84532437	34.96	26.95	0.04	0.35	-8.01
2062	1,076.29	32.28453455	-103.84532602	36.99	30.86	0.01	0.31	-6.13
2063	1,076.81	32.28453901	-103.84532906	36.13	36.29	0.02	0.30	0.16
2064	1,077.33	32.28454343	-103.84533277	35.20	35.90	0.03	0.37	0.70
2065	1,077.86	32.28454655	-103.84533738	30.98	30.86	0.01	0.31	-0.12
2066	1,078.38	32.28454926	-103.84534228	30.78	28.59	0.02	0.34	-2.19
2067	1,078.90	32.28455091	-103.84534766	31.72	33.91	0.02	0.35	2.19
2068	1,079.42	32.28455236	-103.84535311	30.94	35.74	0.04	0.42	4.80
2069	1,079.95	32.28455391	-103.84535892	32.03	36.68	0.04	0.42	4.65
2070	1,080.47	32.28455548	-103.84536476	29.73	34.96	0.03	0.47	5.23
2071	1,080.99	32.28455782	-103.84537060	29.69	34.65	0.08	0.56	4.96
2072	1,081.51	32.28456007	-103.84537644	26.41	29.22	0.08	0.61	2.81
2073	1,082.04	32.28456158	-103.84538214	24.69	22.58	0.05	0.54	-2.11
2074	1,082.56	32.28456239	-103.84538765	26.37	22.19	0.04	0.47	-4.18
2075	1,083.08	32.28456021	-103.84539218	29.22	24.69	0.02	0.41	-4.53
2076	1,083.60	32.28455748	-103.84539561	36.29	31.48	0.00	0.40	-4.81
2077	1,084.12	32.28455332	-103.84539599	35.55	34.81	0.02	0.39	-0.74
2078	1,084.65	32.28454928	-103.84539538	31.09	31.09	0.01	0.40	0.00
2079	1,085.17	32.28454547	-103.84539296	29.45	25.47	0.01	0.37	-3.98

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2080	1,085.69	32.28454167	-103.84539006	26.64	21.76	-0.01	0.28	-4.88
2081	1,086.21	32.28453790	-103.84538653	23.67	20.78	0.03	0.33	-2.89
2082	1,086.73	32.28453551	-103.84538257	21.64	18.32	0.03	0.42	-3.32
2083	1,087.26	32.28453435	-103.84537819	21.95	20.94	0.01	0.45	-1.02
2084	1,087.78	32.28453235	-103.84537401	23.79	23.36	0.03	0.51	-0.43
2085	1,088.30	32.28452980	-103.84536996	23.32	25.51	0.03	0.47	2.19
2086	1,088.82	32.28452628	-103.84536692	23.75	30.27	0.01	0.48	6.52
2087	1,089.35	32.28452234	-103.84536430	22.23	31.06	-0.01	0.38	8.83
2088	1,089.87	32.28451757	-103.84536263	21.52	30.35	-0.02	0.35	8.83
2089	1,090.39	32.28451253	-103.84536122	21.37	31.06	0.01	0.37	9.69
2090	1,090.91	32.28450736	-103.84536010	20.86	28.79	0.00	0.36	7.93
2091	1,091.44	32.28450216	-103.84535903	21.64	29.38	0.01	0.34	7.73
2092	1,091.96	32.28449737	-103.84535747	21.72	28.79	0.01	0.29	7.07
2093	1,092.48	32.28449259	-103.84535586	21.88	28.36	-0.02	0.29	6.48
2094	1,093.00	32.28448762	-103.84535360	22.66	28.67	-0.01	0.32	6.02
2095	1,093.52	32.28448282	-103.84535133	22.85	26.56	-0.01	0.32	3.71
2096	1,094.05	32.28447921	-103.84534900	24.49	24.41	0.00	0.33	-0.08
2097	1,094.57	32.28447585	-103.84534603	23.67	22.70	0.01	0.33	-0.98
2098	1,095.09	32.28447365	-103.84534100	22.11	21.37	0.02	0.34	-0.74
2099	1,095.61	32.28447190	-103.84533564	22.03	22.81	0.01	0.31	0.78
2100	1,096.13	32.28447131	-103.84532958	21.25	24.22	0.01	0.36	2.97
2101	1,096.67	32.28447090	-103.84532332	20.86	23.24	0.02	0.32	2.38
2102	1,097.18	32.28447078	-103.84531713	21.99	23.36	0.04	0.33	1.37
2103	1,097.70	32.28447068	-103.84531077	24.77	29.49	0.03	0.31	4.73
2104	1,098.22	32.28447058	-103.84530434	37.03	5.51	0.03	0.29	-31.52
2105	1,098.74	32.28447047	-103.84529818	112.70	0.00	-0.01	0.29	-112.70
2106	1,099.27	32.28447034	-103.84529219	185.23	70.94	0.00	0.29	-114.30
2107	1,099.79	32.28447031	-103.84528649	221.29	101.45	-0.01	0.32	-119.84
2108	1,100.31	32.28447034	-103.84528090	282.89	99.57	0.00	0.32	-183.32
2109	1,100.83	32.28447040	-103.84527513	326.33	119.61	0.02	0.33	-206.72
2110	1,101.36	32.28447049	-103.84526925	330.66	156.33	0.00	0.35	-174.34
2111	1,101.88	32.28447059	-103.84526298	319.18	151.13	-0.01	0.34	-168.05
2112	1,102.40	32.28447071	-103.84525659	283.91	147.93	-0.01	0.38	-135.98
2113	1,102.92	32.28447062	-103.84525041	282.70	148.91	0.00	0.34	-133.79
2114	1,103.43	32.28447050	-103.84524425	239.88	118.63	0.00	0.26	-121.25
2115	1,103.96	32.28447040	-103.84523825	205.78	82.19	0.02	0.25	-123.59
2116	1,104.49	32.28447030	-103.84523226	174.73	61.68	0.02	0.28	-113.05
2117	1,105.01	32.28447018	-103.84522655	145.31	45.94	-0.01	0.27	-99.38
2118	1,105.54	32.28447016	-103.84522086	175.98	38.83	0.00	0.29	-137.15
2119	1,106.06	32.28447074	-103.84521521	192.73	52.42	-0.02	0.27	-140.31
2120	1,106.58	32.28447119	-103.84520941	189.69	53.01	0.01	0.27	-136.68
2121	1,107.10	32.28447121	-103.84520319	160.12	53.91	0.03	0.28	-106.21
2122	1,107.62	32.28447116	-103.84519693	145.55	68.52	0.01	0.31	-77.03
2123	1,108.14	32.28447096	-103.84519051	171.95	63.56	0.01	0.31	-108.40
2124	1,108.67	32.28447074	-103.84518404	218.52	62.31	-0.02	0.29	-156.21
2125	1,109.19	32.28447050	-103.84517750	265.47	84.81	0.03	0.29	-180.66
2126	1,109.71	32.28447028	-103.84517106	293.83	117.81	0.00	0.32	-176.02
2127	1,110.23	32.28447007	-103.84516467	292.15	146.52	0.02	0.36	-145.63
2128	1,110.76	32.28446978	-103.84515845	300.08	144.06	0.02	0.34	-156.02
2129	1,111.28	32.28446944	-103.84515236	298.52	127.38	0.00	0.32	-171.13
2130	1,111.80	32.28446925	-103.84514647	319.81	146.91	0.01	0.33	-172.89
2131	1,112.32	32.28446915	-103.84514066	320.35	169.73	-0.01	0.36	-150.63
2132	1,112.85	32.28446877	-103.84513432	356.52	170.74	0.05	0.38	-185.78
2133	1,113.37	32.28446828	-103.84512780	377.38	179.41	0.05	0.38	-197.97
2134	1,113.89	32.28446762	-103.84512149	368.48	181.37	0.03	0.40	-187.11
2135	1,114.41	32.28446692	-103.84511522	388.32	202.50	0.03	0.37	-185.82
2136	1,114.93	32.28446645	-103.84510895	375.27	203.24	0.01	0.39	-172.03
2137	1,115.44	32.28446599	-103.84510268	403.59	207.46	0.04	0.39	-196.13
2138	1,115.97	32.28446566	-103.84509670	415.66	208.24	0.02	0.39	-207.42
2139	1,116.50	32.28446533	-103.84509073	419.73	204.96	0.05	0.40	-214.77
2140	1,117.02	32.28446500	-103.84508471	444.77	221.60	0.03	0.43	-223.16
2141	1,117.55	32.28446466	-103.84507860	410.27	230.55	0.01	0.42	-179.73
2142	1,118.07	32.28446421	-103.84507222	433.28	223.67	0.03	0.42	-209.61
2143	1,118.59	32.28446364	-103.84506602	422.34	226.21	0.02	0.39	-196.13
2144	1,119.11	32.28446270	-103.84506053	417.15	207.46	0.03	0.40	-209.69
2145	1,119.63	32.28446197	-103.84505494	417.66	195.00	0.03	0.40	-222.66
2146	1,120.16	32.28446164	-103.84504915	376.72	198.71	0.01	0.40	-178.01
2147	1,120.68	32.28446147	-103.84504334	355.27	192.97	0.01	0.33	-162.30
2148	1,121.20	32.28446151	-103.84503750	306.52	148.83	0.01	0.34	-157.70
2149	1,121.72	32.28446159	-103.84503145	263.24	105.04	0.02	0.32	-158.20
2150	1,122.25	32.28446171	-103.84502521	180.51	82.85	0.05	0.38	-97.66
2151	1,122.77	32.28446172	-103.84501895	108.40	46.25	0.02	0.36	-62.15
2152	1,123.29	32.28446166	-103.84501267	64.10	28.20	0.03	0.33	-35.90
2153	1,123.81	32.28446152	-103.84500656	47.27	33.95	0.02	0.30	-13.32
2154	1,124.33	32.28446136	-103.84500055	45.43	50.63	0.04	0.29	5.20
2155	1,124.85	32.28446138	-103.84499463	48.91	60.70	0.04	0.31	11.80
2156	1,125.38	32.28446147	-103.84498870	45.35	60.78	0.02	0.27	15.43

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2157	1,125.90	32.28446103	-103.84498235	36.72	38.71	0.02	0.26	1.99
2158	1,126.42	32.28446050	-103.84497590	65.78	14.10	0.02	0.29	-51.68
2159	1,126.95	32.28446009	-103.84496934	33.48	6.84	0.02	0.29	-26.64
2160	1,127.47	32.28445968	-103.84496276	30.51	19.38	0.01	0.26	-11.13
2161	1,127.99	32.28445902	-103.84495656	21.88	28.63	0.04	0.28	6.76
2162	1,128.51	32.28445840	-103.84495035	19.18	25.55	0.03	0.27	6.37
2163	1,129.03	32.28445815	-103.84494430	17.50	22.11	0.01	0.22	4.61
2164	1,129.56	32.28445789	-103.84493831	17.03	20.23	0.03	0.28	3.20
2165	1,130.08	32.28445759	-103.84493274	-53.44	9.14	0.16	0.31	62.58
2166	1,130.60	32.28445724	-103.84492694	-3.75	13.05	0.11	0.33	16.80
2167	1,131.12	32.28445674	-103.84492061	12.46	16.17	0.04	0.29	3.71
2168	1,131.65	32.28445622	-103.84491424	14.84	16.88	0.01	0.26	2.03
2169	1,132.17	32.28445567	-103.84490781	14.45	15.63	0.05	0.33	1.17
2170	1,132.69	32.28445518	-103.84490159	14.53	16.25	0.02	0.27	1.72
2171	1,133.21	32.28445477	-103.84489565	13.91	15.43	0.03	0.24	1.52
2172	1,133.73	32.28445482	-103.84488960	13.20	14.61	0.05	0.26	1.41
2173	1,134.26	32.28445528	-103.84488342	13.52	14.14	0.03	0.23	0.63
2174	1,134.78	32.28445575	-103.84487736	13.91	14.18	0.03	0.24	0.27
2175	1,135.30	32.28445622	-103.84487139	12.85	12.54	0.01	0.28	-0.31
2176	1,135.82	32.28445628	-103.84486520	12.62	11.76	0.03	0.28	-0.86
2177	1,136.35	32.28445617	-103.84485890	12.27	11.91	0.03	0.25	-0.35
2178	1,136.87	32.28445566	-103.84485268	13.56	15.39	0.03	0.28	1.84
2179	1,137.39	32.28445503	-103.84484646	13.20	13.71	0.03	0.30	0.51
2180	1,137.91	32.28445456	-103.84484029	11.76	11.41	0.03	0.24	-0.35
2181	1,138.43	32.28445411	-103.84483414	11.95	11.80	0.04	0.26	-0.16
2182	1,138.96	32.28445418	-103.84482817	12.23	11.25	0.02	0.24	-0.98
2183	1,139.48	32.28445426	-103.84482218	11.45	12.03	0.04	0.26	0.59
2184	1,140.00	32.28445406	-103.84481612	13.13	14.10	0.03	0.25	0.98
2185	1,140.52	32.28445388	-103.84481006	11.72	11.48	0.01	0.25	-0.23
2186	1,141.05	32.28445372	-103.84480380	11.17	10.39	0.03	0.23	-0.78
2187	1,141.57	32.28445356	-103.84479750	13.36	13.05	0.02	0.19	-0.31
2188	1,142.09	32.28445336	-103.84479104	10.63	9.88	0.06	0.22	-0.74
2189	1,142.61	32.28445325	-103.84478463	12.70	12.89	0.03	0.22	0.20
2190	1,143.13	32.28445339	-103.84477832	11.72	11.09	0.03	0.25	-0.63
2191	1,143.66	32.28445366	-103.84477202	14.34	14.41	0.03	0.21	0.08
2192	1,144.18	32.28445417	-103.84476577	12.54	9.96	0.03	0.25	-2.58
2193	1,144.70	32.28445451	-103.84475948	14.10	13.13	0.07	0.26	-0.98
2194	1,145.22	32.28445466	-103.84475314	15.43	14.84	0.03	0.20	-0.59
2195	1,145.75	32.28445454	-103.84474641	11.13	12.31	0.09	0.24	1.17
2196	1,146.27	32.28445420	-103.84473945	15.90	17.81	0.06	0.25	1.92
2197	1,146.79	32.28445396	-103.84473277	23.83	24.81	0.02	0.28	0.98
2198	1,147.31	32.28445378	-103.84472627	19.18	24.18	0.02	0.13	5.00
2199	1,147.83	32.28445364	-103.84472014	106.56	-34.53	-0.01	0.13	-141.09
2200	1,148.36	32.28445352	-103.84471416	211.95	9.57	0.01	0.05	-202.38
2201	1,148.88	32.28445400	-103.84470810	263.05	78.83	0.01	0.09	-184.22
2202	1,149.40	32.28445464	-103.84470203	195.94	47.70	0.02	0.04	-148.24
2203	1,149.92	32.28445540	-103.84469593	75.20	-32.66	0.03	-0.02	-107.85
2204	1,150.43	32.28445617	-103.84468981	38.36	-4.69	0.03	-0.03	-43.05
2205	1,150.96	32.28445707	-103.84468322	23.75	14.53	0.03	-0.02	-9.22
2206	1,151.49	32.28445798	-103.84467664	17.54	10.63	0.03	-0.05	-6.91
2207	1,152.01	32.28445885	-103.84467060	10.12	1.13	0.13	-0.33	-8.98
2208	1,152.53	32.28445975	-103.84466464	10.31	-5.78	-0.01	-0.66	-16.09
2209	1,153.06	32.28446088	-103.84465917	5.47	-8.56	-0.05	-0.62	-14.02
2210	1,153.58	32.28446209	-103.84465376	-8.56	-27.89	-0.07	-0.76	-19.34
2211	1,154.10	32.28446362	-103.84464857	-1.41	-24.81	-0.13	-1.09	-23.40
2212	1,154.62	32.28446546	-103.84464328	-9.65	-33.24	-0.07	-1.10	-23.59
2213	1,155.15	32.28446798	-103.84463777	-12.62	-40.04	-0.13	-1.24	-27.42
2214	1,155.67	32.28447127	-103.84463268	-15.82	-50.27	-0.11	-1.24	-34.45
2215	1,156.19	32.28447572	-103.84462826	-0.35	-30.66	-0.07	-1.31	-30.31
2216	1,156.71	32.28448065	-103.84462609	6.41	-24.53	-0.04	-1.04	-30.94
2217	1,157.23	32.28448607	-103.84462635	8.52	-31.52	-0.06	-1.03	-40.04
2218	1,157.76	32.28449027	-103.84462897	5.90	-25.66	-0.05	-0.90	-31.56
2219	1,158.28	32.28449355	-103.84463340	6.84	-14.53	-0.04	-0.66	-21.37
2220	1,158.80	32.28449528	-103.84463887	7.11	-7.62	-0.02	-0.46	-14.73
2221	1,159.32	32.28449617	-103.84464488	12.85	3.91	0.01	-0.28	-8.95
2222	1,159.84	32.28449637	-103.84465128	11.64	3.16	0.08	-0.02	-8.48
2223	1,160.37	32.28449631	-103.84465784	10.31	0.94	0.02	-0.13	-9.38
2224	1,160.89	32.28449636	-103.84466406	8.44	3.32	0.01	-0.02	-5.12
2225	1,161.41	32.28449643	-103.84467022	13.13	9.14	0.06	0.10	-3.98
2226	1,161.93	32.28449611	-103.84467627	11.45	4.73	0.02	0.12	-6.72
2227	1,162.44	32.28449574	-103.84468232	18.95	15.35	0.02	0.06	-3.59
2228	1,162.97	32.28449541	-103.84468821	23.48	20.55	0.04	0.08	-2.93
2229	1,163.50	32.28449506	-103.84469414	61.88	-5.20	0.05	0.15	-67.07
2230	1,164.02	32.28449461	-103.84470043	149.84	-29.53	0.06	0.34	-179.38
2231	1,164.55	32.28449421	-103.84470671	256.17	35.86	0.02	0.17	-220.31
2232	1,165.07	32.28449403	-103.84471311	282.73	108.28	0.03	0.21	-174.45
2233	1,165.59	32.28449395	-103.84471955	285.08	134.77	-0.01	0.21	-150.31

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2234	1,166.11	32.28449420	-103.84472603	251.45	112.89	0.04	0.27	-138.55
2235	1,166.63	32.28449446	-103.84473247	219.26	77.66	0.03	0.23	-141.60
2236	1,167.16	32.28449470	-103.84473872	112.42	16.84	0.05	0.25	-95.59
2237	1,167.68	32.28449483	-103.84474498	53.24	0.31	0.06	0.25	-52.93
2238	1,168.20	32.28449482	-103.84475133	38.20	37.19	0.05	0.30	-1.02
2239	1,168.72	32.28449475	-103.84475750	31.72	43.59	0.05	0.25	11.88
2240	1,169.25	32.28449465	-103.84476351	29.22	38.91	0.01	0.25	9.69
2241	1,169.77	32.28449438	-103.84476946	29.34	39.53	0.03	0.26	10.20
2242	1,170.29	32.28449402	-103.84477540	26.64	35.47	0.06	0.28	8.83
2243	1,170.81	32.28449362	-103.84478177	21.48	29.53	0.06	0.26	8.05
2244	1,171.33	32.28449321	-103.84478838	18.48	24.45	0.05	0.27	5.98
2245	1,171.86	32.28449280	-103.84479504	16.80	22.23	0.04	0.34	5.43
2246	1,172.38	32.28449238	-103.84480174	14.57	17.62	0.03	0.24	3.05
2247	1,172.90	32.28449187	-103.84480785	15.04	16.52	0.01	0.29	1.48
2248	1,173.42	32.28449134	-103.84481389	13.28	15.23	0.03	0.27	1.95
2249	1,173.94	32.28449125	-103.84482019	14.10	15.63	0.03	0.26	1.52
2250	1,174.47	32.28449119	-103.84482652	11.64	14.65	0.10	0.31	3.01
2251	1,174.99	32.28449071	-103.84483257	11.76	13.56	0.07	0.33	1.80
2252	1,175.51	32.28449025	-103.84483868	11.56	12.77	0.04	0.29	1.21
2253	1,176.03	32.28449004	-103.84484520	12.27	12.07	0.02	0.28	-0.20
2254	1,176.56	32.28448981	-103.84485172	10.98	10.86	0.02	0.28	-0.12
2255	1,177.08	32.28448945	-103.84485809	11.25	12.85	0.07	0.37	1.60
2256	1,177.60	32.28448922	-103.84486449	12.46	13.71	0.02	0.32	1.25
2257	1,178.12	32.28448930	-103.84487087	12.27	11.64	0.02	0.26	-0.63
2258	1,178.64	32.28448928	-103.84487727	12.42	12.38	0.03	0.24	-0.04
2259	1,179.17	32.28448907	-103.84488371	11.17	10.86	0.03	0.30	-0.31
2260	1,179.69	32.28448877	-103.84488983	11.09	11.06	0.04	0.29	-0.04
2261	1,180.21	32.28448835	-103.84489561	12.19	11.76	0.00	0.25	-0.43
2262	1,180.73	32.28448817	-103.84490150	10.27	10.78	0.06	0.26	0.51
2263	1,181.26	32.28448822	-103.84490750	12.27	12.77	0.04	0.29	0.51
2264	1,181.78	32.28448853	-103.84491400	11.84	13.59	0.05	0.30	1.76
2265	1,182.30	32.28448901	-103.84492080	12.31	12.11	0.03	0.25	-0.20
2266	1,182.82	32.28448947	-103.84492727	12.31	11.76	0.01	0.27	-0.55
2267	1,183.34	32.28448991	-103.84493360	11.45	12.03	0.06	0.31	0.59
2268	1,183.87	32.28448996	-103.84493990	12.81	13.20	0.03	0.27	0.39
2269	1,184.39	32.28448991	-103.84494620	11.84	11.64	0.06	0.26	-0.20
2270	1,184.91	32.28448947	-103.84495218	12.46	12.03	0.04	0.30	-0.43
2271	1,185.43	32.28448896	-103.84495816	12.70	12.81	0.01	0.27	0.12
2272	1,185.96	32.28448873	-103.84496456	12.50	13.48	0.04	0.30	0.98
2273	1,186.48	32.28448852	-103.84497097	13.91	14.57	0.01	0.29	0.66
2274	1,187.00	32.28448885	-103.84497118	12.97	13.24	0.04	0.28	0.27
2275	1,187.52	32.28448918	-103.84498337	2.97	14.26	0.12	0.32	11.29
2276	1,188.05	32.28448957	-103.84498930	11.76	14.84	0.07	0.31	3.09
2277	1,188.57	32.28448992	-103.84499526	13.67	14.30	0.05	0.27	0.63
2278	1,189.09	32.28449014	-103.84500134	15.04	14.92	0.02	0.27	-0.12
2279	1,189.61	32.28449026	-103.84500740	15.47	16.02	0.05	0.31	0.55
2280	1,190.13	32.28449017	-103.84501342	15.98	16.41	0.01	0.28	0.43
2281	1,190.66	32.28449017	-103.84501966	16.02	17.89	0.04	0.28	1.88
2282	1,191.18	32.28449033	-103.84502626	16.80	18.36	0.04	0.28	1.56
2283	1,191.70	32.28449053	-103.84503272	16.02	20.63	0.07	0.27	4.61
2284	1,192.22	32.28449079	-103.84503905	17.34	21.91	0.06	0.27	4.57
2285	1,192.75	32.28449111	-103.84504534	16.88	21.56	0.03	0.28	4.69
2286	1,193.27	32.28449148	-103.84505144	18.28	23.20	0.05	0.26	4.92
2287	1,193.79	32.28449181	-103.84505757	19.49	25.70	-0.01	0.23	6.21
2288	1,194.31	32.28449210	-103.84506370	19.22	30.51	0.02	0.25	11.29
2289	1,194.83	32.28449194	-103.84506932	32.70	41.60	0.02	0.24	8.91
2290	1,195.36	32.28449161	-103.84507474	37.15	47.93	0.04	0.25	10.78
2291	1,195.88	32.28449112	-103.84508018	54.45	22.11	0.04	0.28	-32.34
2292	1,196.40	32.28449059	-103.84508563	75.59	12.50	0.02	0.27	-63.09
2293	1,196.92	32.28449055	-103.84509139	62.81	20.74	0.04	0.27	-42.07
2294	1,197.43	32.28449057	-103.84509720	70.39	70.55	0.02	0.23	0.16
2295	1,197.96	32.28449083	-103.84510329	64.84	93.13	0.03	0.27	28.28
2296	1,198.49	32.28449111	-103.84510940	56.29	79.22	0.03	0.30	22.93
2297	1,199.01	32.28449135	-103.84511534	75.12	41.25	0.02	0.29	-33.87
2298	1,199.53	32.28449158	-103.84512133	128.67	21.88	0.02	0.27	-106.80
2299	1,200.05	32.28449173	-103.84512752	154.69	32.23	0.00	0.25	-122.46
2300	1,200.58	32.28449182	-103.84513366	163.59	31.21	0.05	0.28	-132.38
2301	1,201.10	32.28449170	-103.84513951	165.20	31.56	0.01	0.29	-133.63
2302	1,201.62	32.28449168	-103.84514552	174.84	33.56	0.06	0.33	-141.29
2303	1,202.15	32.28449185	-103.84515188	132.34	28.24	0.05	0.30	-104.10
2304	1,202.67	32.28449214	-103.84515819	80.82	17.58	0.03	0.28	-63.24
2305	1,203.19	32.28449262	-103.84516449	58.13	25.94	0.03	0.27	-32.19
2306	1,203.71	32.28449307	-103.84517074	58.01	53.67	0.00	0.28	-4.34
2307	1,204.23	32.28449350	-103.84517696	63.98	50.39	0.06	0.30	-13.59
2308	1,204.75	32.28449391	-103.84518277	102.58	27.42	0.05	0.29	-75.16
2309	1,205.28	32.28449432	-103.84518831	123.05	40.98	0.03	0.30	-82.07
2310	1,205.80	32.28449492	-103.84519393	141.88	48.83	0.03	0.29	-93.05

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2311	1,206.32	32.28449564	-103.84519963	152.97	60.27	0.02	0.28	-92.70
2312	1,206.85	32.28449631	-103.84520547	172.93	67.11	0.07	0.30	-105.82
2313	1,207.37	32.28449696	-103.84521135	184.26	69.92	0.03	0.32	-114.34
2314	1,207.89	32.28449734	-103.84521752	208.59	68.09	0.03	0.31	-140.51
2315	1,208.41	32.28449766	-103.84522379	167.15	64.30	0.24	0.37	-102.85
2316	1,208.93	32.28449821	-103.84522971	242.34	111.99	0.11	0.45	-130.35
2317	1,209.44	32.28449877	-103.84523557	251.64	108.59	0.09	0.40	-143.05
2318	1,209.97	32.28449964	-103.84524150	225.86	71.48	0.02	0.30	-154.38
2319	1,210.50	32.28450047	-103.84524744	219.49	71.06	0.06	0.35	-148.44
2320	1,211.02	32.28450079	-103.84525350	212.27	86.95	0.03	0.34	-125.31
2321	1,211.54	32.28450109	-103.84525953	206.33	65.27	0.07	0.32	-141.06
2322	1,212.07	32.28450129	-103.84526542	175.55	46.52	0.04	0.32	-129.02
2323	1,212.59	32.28450155	-103.84527141	128.56	35.16	0.06	0.33	-93.40
2324	1,213.11	32.28450200	-103.84527768	81.68	16.88	0.07	0.28	-64.81
2325	1,213.63	32.28450265	-103.84528373	45.63	18.09	0.04	0.28	-27.54
2326	1,214.16	32.28450372	-103.84528937	37.66	32.15	0.05	0.30	-5.51
2327	1,214.68	32.28450492	-103.84529478	32.27	34.06	0.05	0.30	1.80
2328	1,215.20	32.28450628	-103.84529989	30.86	29.34	0.10	0.33	-1.52
2329	1,215.72	32.28450748	-103.84530521	31.84	29.02	0.08	0.33	-2.81
2330	1,216.24	32.28450850	-103.84531075	28.98	28.16	0.04	0.28	-0.82
2331	1,216.77	32.28450970	-103.84531579	28.24	26.91	0.06	0.31	-1.33
2332	1,217.29	32.28451102	-103.84532048	24.84	24.53	0.05	0.30	-0.31
2333	1,217.81	32.28451335	-103.84532354	25.04	26.06	0.06	0.33	1.02
2334	1,218.33	32.28451619	-103.84532581	26.99	28.32	0.08	0.33	1.33
2335	1,218.86	32.28451871	-103.84532682	28.20	27.38	0.06	0.30	-0.82
2336	1,219.38	32.28452114	-103.84532743	29.65	27.73	0.04	0.29	-1.91
2337	1,219.90	32.28452296	-103.84532695	31.48	28.40	0.04	0.31	-3.09
2338	1,220.42	32.28452467	-103.84532627	30.31	29.06	0.01	0.32	-1.25
2339	1,220.94	32.28452452	-103.84532261	31.72	28.87	0.05	0.33	-2.85
2340	1,221.47	32.28452422	-103.84531869	32.85	29.61	0.05	0.34	-3.24
2341	1,221.99	32.28452294	-103.84531369	30.23	29.22	-0.01	0.31	-1.02
2342	1,222.51	32.28452173	-103.84530871	31.09	27.03	0.02	0.34	-4.06
2343	1,223.03	32.28452107	-103.84530385	29.26	25.74	0.02	0.31	-3.52
2344	1,223.56	32.28452047	-103.84529888	26.88	25.55	0.11	0.37	-1.33
2345	1,224.08	32.28452016	-103.84529368	26.45	27.15	0.05	0.32	0.70
2346	1,224.60	32.28451964	-103.84528835	24.92	26.29	0.02	0.32	1.37
2347	1,225.12	32.28451860	-103.84528276	24.96	24.65	0.06	0.31	-0.31
2348	1,225.64	32.28451759	-103.84527732	23.95	25.16	0.04	0.36	1.21
2349	1,226.17	32.28451665	-103.84527218	24.26	27.62	0.01	0.27	3.36
2350	1,226.69	32.28451600	-103.84526701	26.88	30.12	0.03	0.29	3.24
2351	1,227.21	32.28451574	-103.84526181	26.84	32.58	0.00	0.28	5.74
2352	1,227.73	32.28451563	-103.84525646	28.28	34.22	0.03	0.30	5.94
2353	1,228.26	32.28451567	-103.84525097	29.77	37.46	0.03	0.31	7.70
2354	1,228.78	32.28451511	-103.84524505	29.38	39.45	0.09	0.33	10.08
2355	1,229.30	32.28451416	-103.84523884	31.06	38.05	0.06	0.37	6.99
2356	1,229.82	32.28451314	-103.84523288	31.60	39.02	0.02	0.31	7.42
2357	1,230.35	32.28451208	-103.84522699	35.08	44.22	0.03	0.29	9.14
2358	1,230.87	32.28451077	-103.84522218	35.82	44.34	0.01	0.28	8.52
2359	1,231.39	32.28450939	-103.84521765	38.24	46.45	0.06	0.29	8.20
2360	1,231.91	32.28450913	-103.84521417	40.08	40.20	0.02	0.29	0.12
2361	1,232.43	32.28450905	-103.84521085	38.36	35.66	0.01	0.31	-2.70
2362	1,232.95	32.28450850	-103.84520926	40.66	40.82	0.00	0.31	0.16
2363	1,233.48	32.28450796	-103.84520778	39.96	36.45	-0.01	0.26	-3.52
2364	1,234.00	32.28450839	-103.84520678	37.62	21.45	0.00	0.29	-16.17
2365	1,234.53	32.28450872	-103.84520601	36.41	18.56	0.03	0.30	-17.85
2366	1,235.04	32.28450829	-103.84520686	35.04	25.94	0.01	0.25	-9.10
2367	1,235.57	32.28450797	-103.84520752	34.38	25.51	0.02	0.29	-8.87
2368	1,236.09	32.28450809	-103.84520735	34.92	16.33	0.01	0.25	-18.59
2369	1,236.61	32.28450829	-103.84520693	37.11	18.24	0.02	0.26	-18.87
2370	1,237.13	32.28450869	-103.84520591	42.07	30.12	0.00	0.28	-11.95
2371	1,237.66	32.28450961	-103.84520436	46.17	40.39	0.01	0.30	-5.78
2372	1,238.18	32.28451136	-103.84520194	40.59	44.77	-0.01	0.28	4.18
2373	1,238.70	32.28451272	-103.84519820	38.98	46.33	0.03	0.27	7.34
2374	1,239.22	32.28451364	-103.84519288	43.71	32.62	0.01	0.27	-11.09
2375	1,239.75	32.28451385	-103.84518694	45.35	15.27	0.09	0.29	-30.08
2376	1,240.27	32.28451346	-103.84518058	32.46	11.95	0.06	0.27	-20.51
2377	1,240.79	32.28451295	-103.84517403	24.61	25.78	0.06	0.28	1.17
2378	1,241.31	32.28451236	-103.84516740	20.04	26.64	0.09	0.29	6.60
2379	1,241.83	32.28451169	-103.84516085	18.16	23.71	0.03	0.26	5.55
2380	1,242.35	32.28451097	-103.84515434	16.21	21.56	0.09	0.29	5.35
2381	1,242.88	32.28451042	-103.84514855	17.73	21.80	0.03	0.28	4.06
2382	1,243.40	32.28450991	-103.84514293	17.97	22.54	0.06	0.29	4.57
2383	1,243.92	32.28450926	-103.84513882	19.96	23.79	0.04	0.29	3.83
2384	1,244.43	32.28450860	-103.84513489	19.38	24.06	0.02	0.30	4.69
2385	1,244.96	32.28450870	-103.84513262	18.05	23.71	0.01	0.29	5.66
2386	1,245.49	32.28450882	-103.84513056	16.25	18.13	0.01	0.27	1.88
2387	1,246.01	32.28450876	-103.84513057	15.86	14.49	0.04	0.28	-1.37

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2388	1,246.53	32.28450863	-103.84513060	16.02	14.96	0.02	0.31	-1.06
2389	1,247.06	32.28450810	-103.84513072	15.23	16.76	0.05	0.29	1.52
2390	1,247.58	32.28450806	-103.84513038	15.43	16.45	0.02	0.31	1.02
2391	1,248.10	32.28450970	-103.84512849	17.50	18.83	0.04	0.30	1.33
2392	1,248.62	32.28451082	-103.84512531	19.14	20.43	0.03	0.27	1.29
2393	1,249.14	32.28451076	-103.84511931	22.38	18.44	0.04	0.28	-3.95
2394	1,249.67	32.28451054	-103.84511300	26.06	20.23	0.00	0.22	-5.82
2395	1,250.19	32.28451008	-103.84510618	32.89	19.65	0.00	0.25	-13.24
2396	1,250.71	32.28450967	-103.84509956	42.27	18.48	0.02	0.27	-23.79
2397	1,251.24	32.28450932	-103.84509315	61.21	21.95	0.11	0.32	-39.26
2398	1,251.76	32.28450908	-103.84508655	81.09	23.59	0.04	0.31	-57.50
2399	1,252.28	32.28450894	-103.84507971	91.06	24.49	0.03	0.26	-66.56
2400	1,252.80	32.28450894	-103.84507306	83.52	25.04	0.04	0.27	-58.48
2401	1,253.32	32.28450901	-103.84506645	47.27	14.53	0.01	0.26	-32.74
2402	1,253.84	32.28450898	-103.84505976	33.71	20.55	0.04	0.28	-13.16
2403	1,254.37	32.28450893	-103.84505305	27.97	35.12	0.01	0.27	7.15
2404	1,254.89	32.28450865	-103.84504639	21.88	33.87	0.10	0.30	11.99
2405	1,255.41	32.28450832	-103.84503973	19.92	27.85	0.06	0.30	7.93
2406	1,255.92	32.28450823	-103.84503369	18.28	24.30	0.04	0.28	6.02
2407	1,256.44	32.28450816	-103.84502766	18.83	22.27	0.04	0.28	3.44
2408	1,256.97	32.28450843	-103.84502102	17.62	19.81	0.01	0.25	2.19
2409	1,257.50	32.28450871	-103.84501436	17.58	21.06	0.07	0.29	3.48
2410	1,258.02	32.28450898	-103.84500817	16.84	20.04	0.03	0.27	3.20
2411	1,258.54	32.28450923	-103.84500193	15.51	18.09	0.08	0.30	2.58
2412	1,259.07	32.28450944	-103.84499564	15.98	18.32	0.05	0.27	2.34
2413	1,259.59	32.28450968	-103.84498927	14.84	17.27	0.07	0.28	2.42
2414	1,260.11	32.28451001	-103.84498263	15.00	17.19	0.04	0.27	2.19
2415	1,260.63	32.28451030	-103.84497605	14.65	16.13	0.02	0.28	1.49
2416	1,261.15	32.28451049	-103.84496958	13.13	15.63	0.06	0.28	2.50
2417	1,261.68	32.28451068	-103.84496314	13.71	15.16	0.03	0.26	1.45
2418	1,262.20	32.28451087	-103.84495667	13.59	15.51	0.08	0.30	1.91
2419	1,262.72	32.28451112	-103.84495024	14.06	15.55	0.05	0.29	1.48
2420	1,263.24	32.28451141	-103.84494383	13.67	15.98	0.03	0.29	2.31
2421	1,263.77	32.28451182	-103.84493761	13.71	14.73	0.03	0.27	1.02
2422	1,264.29	32.28451232	-103.84493150	13.75	14.34	0.02	0.27	0.59
2423	1,264.81	32.28451264	-103.84492523	13.40	15.04	0.05	0.25	1.64
2424	1,265.33	32.28451288	-103.84491890	13.44	14.65	0.01	0.27	1.21
2425	1,265.85	32.28451303	-103.84491218	12.42	14.96	0.06	0.27	2.54
2426	1,266.38	32.28451316	-103.84490531	12.54	13.79	0.04	0.26	1.25
2427	1,266.90	32.28451305	-103.84498865	12.46	13.44	0.04	0.27	0.98
2428	1,267.42	32.28451290	-103.84489203	12.62	12.77	0.05	0.28	0.16
2429	1,267.94	32.28451299	-103.84488528	13.40	13.32	0.01	0.25	-0.08
2430	1,268.47	32.28451309	-103.84487853	11.99	13.56	0.08	0.29	1.56
2431	1,268.99	32.28451322	-103.84487190	13.44	14.65	0.06	0.29	1.21
2432	1,269.51	32.28451335	-103.84486530	12.89	15.08	0.08	0.27	2.19
2433	1,270.03	32.28451353	-103.84485889	13.67	14.81	0.05	0.28	1.13
2434	1,270.56	32.28451373	-103.84485237	14.06	16.17	0.04	0.28	2.11
2435	1,271.08	32.28451400	-103.84484566	14.73	17.23	0.05	0.27	2.50
2436	1,271.60	32.28451429	-103.84483904	16.88	19.18	0.02	0.28	2.31
2437	1,272.12	32.28451460	-103.84483273	23.24	27.03	0.05	0.26	3.79
2438	1,272.65	32.28451480	-103.84482654	24.41	27.58	0.03	0.27	3.16
2439	1,273.17	32.28451480	-103.84482088	51.99	3.24	0.07	0.30	-48.75
2440	1,273.69	32.28451497	-103.84481522	78.01	12.42	0.05	0.30	-65.59
2441	1,274.21	32.28451537	-103.84480964	93.75	38.63	0.03	0.31	-55.12
2442	1,274.73	32.28451591	-103.84480452	104.92	59.88	0.03	0.34	-45.04
2443	1,275.26	32.28451658	-103.84479983	111.45	48.71	0.03	0.30	-62.73
2444	1,275.78	32.28451704	-103.84479437	128.98	35.00	0.04	0.29	-93.98
2445	1,276.30	32.28451739	-103.84478841	159.96	50.98	0.04	0.27	-108.98
2446	1,276.82	32.28451752	-103.84478227	143.40	70.20	0.02	0.26	-73.20
2447	1,277.34	32.28451756	-103.84477604	121.72	61.64	0.07	0.37	-60.08
2448	1,277.87	32.28451796	-103.84476999	138.83	134.69	0.07	0.37	-4.14
2449	1,278.39	32.28451848	-103.84476399	161.09	237.66	0.11	0.37	76.56
2450	1,278.91	32.28451909	-103.84475806	127.46	155.16	0.06	0.31	27.70
2451	1,279.43	32.28451972	-103.84475212	192.89	56.21	0.03	0.27	-136.68
2452	1,279.95	32.28451990	-103.84474574	239.30	70.86	0.05	0.30	-168.44
2453	1,280.48	32.28452006	-103.84473933	231.29	80.47	0.01	0.28	-150.82
2454	1,281.00	32.28452011	-103.84473320	177.89	56.41	0.07	0.27	-121.49
2455	1,281.52	32.28452013	-103.84472709	146.72	45.31	0.05	0.24	-101.41
2456	1,282.04	32.28451996	-103.84472121	93.87	36.91	0.05	0.22	-56.95
2457	1,282.57	32.28451995	-103.84471525	42.42	9.65	0.06	0.22	-32.77
2458	1,283.09	32.28452053	-103.84470905	31.52	18.44	0.01	0.17	-13.09
2459	1,283.61	32.28452114	-103.84470295	24.30	30.12	0.04	0.19	5.82
2460	1,284.13	32.28452181	-103.84469708	19.92	23.36	0.03	0.13	3.44
2461	1,284.65	32.28452242	-103.84469096	16.56	20.35	0.05	0.19	3.79
2462	1,285.18	32.28452294	-103.84468442	17.07	20.39	0.03	0.12	3.32
2463	1,285.70	32.28452406	-103.84467826	15.20	16.88	0.02	0.17	1.68
2464	1,286.22	32.28452583	-103.84467263	16.80	16.88	0.02	0.15	0.08

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2465	1,286.74	32.28452874	-103.84466942	20.51	18.01	0.03	0.12	-2.50
2466	1,287.26	32.28453260	-103.84466823	26.09	27.23	0.03	0.03	1.13
2467	1,287.79	32.28453590	-103.84467031	28.52	33.63	0.03	0.03	5.12
2468	1,288.31	32.28453884	-103.84467434	29.49	34.30	0.01	0.02	4.81
2469	1,288.83	32.28453996	-103.84467923	33.79	47.62	0.01	-0.01	13.83
2470	1,289.35	32.28454037	-103.84468448	36.60	53.83	-0.02	-0.09	17.23
2471	1,289.88	32.28454114	-103.84468941	37.23	56.33	-0.03	-0.12	19.10
2472	1,290.40	32.28454200	-103.84469426	40.27	55.98	0.00	-0.06	15.70
2473	1,290.91	32.28454217	-103.84469884	30.00	42.58	-0.01	0.00	12.58
2474	1,291.43	32.28454224	-103.84470341	30.27	36.41	0.00	0.02	6.13
2475	1,291.96	32.28454188	-103.84470975	96.84	27.15	-0.01	-0.05	-69.69
2476	1,292.49	32.28454149	-103.84471618	140.90	49.26	-0.03	-0.02	-91.64
2477	1,293.01	32.28454112	-103.84472207	178.52	55.90	0.00	0.11	-122.62
2478	1,293.53	32.28454082	-103.84472792	229.22	71.21	0.01	0.32	-158.01
2479	1,294.05	32.28454089	-103.84473344	263.67	97.97	0.02	0.30	-165.70
2480	1,294.58	32.28454084	-103.84473883	303.01	123.75	0.05	0.39	-179.26
2481	1,295.10	32.28454038	-103.84474361	314.77	130.63	0.03	0.40	-184.14
2482	1,295.62	32.28454000	-103.84474863	332.50	137.89	0.03	0.38	-194.61
2483	1,296.14	32.28453979	-103.84475410	341.95	159.53	0.04	0.39	-182.42
2484	1,296.66	32.28453977	-103.84475954	315.55	166.76	0.03	0.44	-148.79
2485	1,297.19	32.28454002	-103.84476492	315.74	161.80	0.08	0.46	-153.95
2486	1,297.71	32.28454030	-103.84477040	309.41	148.98	0.04	0.40	-160.43
2487	1,298.23	32.28454061	-103.84477598	305.16	133.36	0.08	0.48	-171.80
2488	1,298.75	32.28454062	-103.84478128	297.66	132.50	0.06	0.46	-165.16
2489	1,299.28	32.28454039	-103.84478634	278.09	140.20	0.02	0.42	-137.89
2490	1,299.80	32.28454026	-103.84479173	283.71	141.52	0.04	0.44	-142.19
2491	1,300.32	32.28454019	-103.84479730	280.43	136.37	0.05	0.41	-144.06
2492	1,300.84	32.28454026	-103.84480285	263.75	136.60	0.04	0.41	-127.15
2493	1,301.36	32.28454040	-103.84480840	252.03	133.13	0.04	0.43	-118.91
2494	1,301.89	32.28454062	-103.84481410	249.92	137.93	0.04	0.40	-111.99
2495	1,302.41	32.28454086	-103.84481983	247.66	134.96	0.03	0.40	-112.70
2496	1,302.92	32.28454066	-103.84482535	256.29	126.45	0.05	0.41	-129.84
2497	1,303.44	32.28454043	-103.84483086	261.48	125.98	0.03	0.40	-135.51
2498	1,303.97	32.28454040	-103.84483708	246.45	108.24	0.06	0.42	-138.20
2499	1,304.50	32.28454040	-103.84484332	231.33	89.92	0.02	0.38	-141.41
2500	1,305.02	32.28454060	-103.84484924	224.14	85.55	0.06	0.39	-138.59
2501	1,305.54	32.28454083	-103.84485518	207.73	91.33	0.06	0.38	-116.41
2502	1,306.07	32.28454118	-103.84486125	195.98	62.03	0.04	0.35	-133.95
2503	1,306.59	32.28454144	-103.84486736	213.75	50.35	0.04	0.36	-163.40
2504	1,307.11	32.28454141	-103.84487357	218.01	62.85	0.02	0.35	-155.16
2505	1,307.63	32.28454139	-103.84487959	214.06	57.23	0.07	0.38	-156.84
2506	1,308.15	32.28454139	-103.84488522	218.87	50.43	0.04	0.38	-168.44
2507	1,308.68	32.28454145	-103.84489119	227.97	55.94	0.04	0.37	-172.03
2508	1,309.20	32.28454163	-103.84489734	215.08	53.95	0.04	0.40	-161.13
2509	1,309.72	32.28454188	-103.84490231	173.87	44.96	0.03	0.38	-128.91
2510	1,310.24	32.28454222	-103.84490603	121.52	22.34	0.03	0.37	-99.18
2511	1,310.77	32.28454247	-103.84490769	90.31	14.69	0.01	0.36	-75.63
2512	1,311.29	32.28454266	-103.84490788	75.78	4.77	0.01	0.35	-71.02
2513	1,311.81	32.28454277	-103.84490859	69.26	-4.53	0.03	0.34	-73.79
2514	1,312.33	32.28454283	-103.84490955	66.99	-13.95	0.03	0.35	-80.94
2515	1,312.85	32.28454219	-103.84491300	83.98	-8.98	0.07	0.39	-92.97
2516	1,313.38	32.28454133	-103.84491726	123.16	23.48	0.05	0.36	-99.69
2517	1,313.90	32.28454104	-103.84492298	146.60	32.31	0.07	0.37	-114.30
2518	1,314.42	32.28454085	-103.84492897	159.73	43.16	0.03	0.33	-116.56
2519	1,314.94	32.28454035	-103.84493572	168.95	54.49	0.01	0.29	-114.45
2520	1,315.47	32.28453983	-103.84494253	173.05	57.38	0.03	0.28	-115.66
2521	1,315.99	32.28453973	-103.84494888	179.88	55.12	0.06	0.32	-124.77
2522	1,316.51	32.28453963	-103.84495527	180.51	45.74	0.06	0.31	-134.77
2523	1,317.03	32.28453951	-103.84496202	157.62	40.23	0.02	0.28	-117.38
2524	1,317.56	32.28453935	-103.84496878	136.41	30.66	0.05	0.32	-105.74
2525	1,318.08	32.28453901	-103.84497518	68.83	6.64	0.03	0.30	-62.19
2526	1,318.60	32.28453870	-103.84498170	65.98	8.16	0.07	0.29	-57.81
2527	1,319.12	32.28453848	-103.84498840	62.66	8.87	0.03	0.26	-53.79
2528	1,319.64	32.28453842	-103.84499524	43.36	7.27	0.07	0.32	-36.09
2529	1,320.17	32.28453866	-103.84500229	40.51	22.93	0.02	0.31	-17.58
2530	1,320.69	32.28453889	-103.84500918	31.91	24.69	0.00	0.40	-7.23
2531	1,321.21	32.28453914	-103.84501591	28.09	25.27	0.06	0.33	-2.81
2532	1,321.73	32.28453946	-103.84502268	24.49	30.08	0.02	0.29	5.59
2533	1,322.26	32.28453986	-103.84502950	20.94	29.10	0.11	0.35	8.16
2534	1,322.78	32.28454023	-103.84503602	19.88	26.88	0.07	0.30	6.99
2535	1,323.30	32.28454057	-103.84504235	16.91	25.16	0.12	0.36	8.24
2536	1,323.82	32.28454075	-103.84504858	16.91	23.36	0.05	0.30	6.45
2537	1,324.34	32.28454085	-103.84505478	15.70	21.33	0.07	0.30	5.63
2538	1,324.87	32.28454068	-103.84506083	16.02	20.55	0.06	0.32	4.53
2539	1,325.39	32.28454042	-103.84506684	15.82	19.77	0.02	0.29	3.95
2540	1,325.91	32.28454041	-103.84507348	15.90	19.41	0.04	0.31	3.52
2541	1,326.43	32.28454043	-103.84508026	16.13	19.26	0.03	0.29	3.13

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2542	1,326.95	32.28454077	-103.84508690	15.39	19.10	0.07	0.29	3.71
2543	1,327.48	32.28454115	-103.84509356	15.74	19.38	0.05	0.32	3.63
2544	1,328.00	32.28454204	-103.84509987	15.20	18.40	0.06	0.32	3.20
2545	1,328.52	32.28454283	-103.84510615	15.78	18.87	0.05	0.33	3.09
2546	1,329.04	32.28454286	-103.84512025	16.48	19.10	0.03	0.30	2.62
2547	1,329.57	32.28454282	-103.84511807	15.74	19.57	0.07	0.35	3.83
2548	1,330.09	32.28454252	-103.84512392	16.25	18.13	0.05	0.33	1.88
2549	1,330.61	32.28454233	-103.84513006	14.45	17.50	0.10	0.36	3.05
2550	1,331.13	32.28454243	-103.84513663	15.47	17.81	0.06	0.33	2.34
2551	1,331.66	32.28454281	-103.84514321	15.20	18.75	0.04	0.30	3.56
2552	1,332.18	32.28454363	-103.84514940	14.84	17.97	0.05	0.33	3.13
2553	1,332.70	32.28454436	-103.84515559	16.37	19.02	0.01	0.32	2.66
2554	1,333.22	32.28454496	-103.84516164	15.35	19.18	0.06	0.31	3.83
2555	1,333.74	32.28454536	-103.84516720	16.48	19.45	0.03	0.31	2.97
2556	1,334.26	32.28454559	-103.84517234	17.15	20.98	0.04	0.31	3.83
2557	1,334.79	32.28454562	-103.84517691	20.51	25.04	0.03	0.32	4.53
2558	1,335.31	32.28454552	-103.84518117	25.00	30.51	0.02	0.31	5.51
2559	1,335.83	32.28454621	-103.84518498	20.20	28.83	0.03	0.32	8.63
2560	1,336.35	32.28454722	-103.84518862	23.48	15.82	0.03	0.32	-7.66
2561	1,336.87	32.28454799	-103.84519051	53.09	-1.52	0.01	0.33	-54.61
2562	1,337.40	32.28454870	-103.84519195	73.32	-8.91	0.02	0.33	-82.23
2563	1,337.92	32.28454908	-103.84519226	79.96	-12.62	0.02	0.36	-92.58
2564	1,338.43	32.28454943	-103.84519242	78.59	-12.93	0.02	0.33	-91.52
2565	1,338.96	32.28454979	-103.84519306	77.66	-15.66	0.02	0.35	-93.32
2566	1,339.49	32.28455012	-103.84519368	83.36	-18.13	0.02	0.36	-101.48
2567	1,340.01	32.28454999	-103.84519362	85.23	-18.16	0.03	0.34	-103.40
2568	1,340.53	32.28454981	-103.84519346	80.90	-16.99	0.03	0.35	-97.89
2569	1,341.05	32.28454935	-103.84519272	78.59	-18.13	0.04	0.34	-96.72
2570	1,341.58	32.28454907	-103.84519235	79.30	-15.78	0.04	0.33	-95.08
2571	1,342.10	32.28454940	-103.84519322	80.39	-13.24	0.03	0.33	-93.63
2572	1,342.62	32.28454931	-103.84519489	82.89	-10.08	0.03	0.34	-92.97
2573	1,343.14	32.28454828	-103.84519833	94.34	-0.43	0.04	0.34	-94.77
2574	1,343.66	32.28454796	-103.84520204	79.61	18.24	0.04	0.35	-61.37
2575	1,344.19	32.28454875	-103.84520617	63.91	16.95	0.03	0.38	-46.95
2576	1,344.71	32.28454938	-103.84521082	39.88	18.01	-0.01	0.31	-21.88
2577	1,345.23	32.28454985	-103.84521606	28.95	24.92	0.03	0.32	-4.02
2578	1,345.75	32.28454966	-103.84522091	24.77	31.76	0.02	0.33	6.99
2579	1,346.28	32.28454894	-103.84522546	22.23	30.70	0.02	0.34	8.48
2580	1,346.80	32.28454840	-103.84523100	19.69	27.15	0.08	0.36	7.46
2581	1,347.32	32.28454795	-103.84523710	20.78	24.61	0.07	0.36	3.83
2582	1,347.84	32.28454816	-103.84524378	21.45	24.38	0.04	0.33	2.93
2583	1,348.37	32.28454861	-103.84525067	21.91	25.70	0.08	0.37	3.79
2584	1,348.89	32.28454919	-103.84525771	23.91	26.68	0.03	0.32	2.77
2585	1,349.41	32.28454981	-103.84526481	27.07	26.60	0.09	0.37	-0.47
2586	1,349.92	32.28455005	-103.84527126	31.17	27.85	0.05	0.34	-3.32
2587	1,350.44	32.28455025	-103.84527769	32.15	29.10	0.12	0.36	-3.05
2588	1,350.97	32.28455078	-103.84528383	34.06	31.64	0.04	0.32	-2.42
2589	1,351.50	32.28455133	-103.84528994	32.54	32.97	0.07	0.37	0.43
2590	1,352.02	32.28455194	-103.84529592	33.67	33.20	0.05	0.34	-0.47
2591	1,352.54	32.28455254	-103.84530198	32.54	33.83	0.04	0.34	1.29
2592	1,353.07	32.28455306	-103.84530842	33.13	34.02	0.06	0.35	0.90
2593	1,353.59	32.28455367	-103.84531481	31.25	34.45	0.04	0.34	3.20
2594	1,354.11	32.28455458	-103.84532101	31.06	34.22	0.07	0.32	3.16
2595	1,354.64	32.28455532	-103.84532736	29.41	32.93	0.07	0.36	3.52
2596	1,355.15	32.28455568	-103.84533358	27.23	29.22	0.03	0.33	1.99
2597	1,355.68	32.28455593	-103.84533971	28.01	31.52	0.02	0.32	3.52
2598	1,356.20	32.28455600	-103.84534550	27.81	33.13	0.02	0.35	5.31
2599	1,356.72	32.28455636	-103.84535113	27.46	32.97	0.08	0.40	5.51
2600	1,357.24	32.28455700	-103.84535663	27.81	33.40	0.05	0.44	5.59
2601	1,357.76	32.28455829	-103.84536230	28.24	33.59	0.06	0.46	5.35
2602	1,358.29	32.28456003	-103.84536813	29.22	34.92	0.07	0.59	5.70
2603	1,358.82	32.28456157	-103.84537389	25.74	28.75	0.05	0.52	3.01
2604	1,359.33	32.28456296	-103.84537941	25.23	25.86	0.05	0.57	0.63
2605	1,359.85	32.28456421	-103.84538463	26.02	23.67	0.05	0.52	-2.34
2606	1,360.38	32.28456542	-103.84538980	26.45	25.23	0.04	0.41	-1.21
2607	1,360.90	32.28456433	-103.84539389	29.38	24.65	0.05	0.33	-4.73
2608	1,361.42	32.28456280	-103.84539780	30.51	24.53	0.06	0.30	-5.98
2609	1,361.94	32.28455968	-103.84539889	34.06	27.31	0.04	0.34	-6.76
2610	1,362.46	32.28455643	-103.84539972	38.01	33.91	0.02	0.44	-4.10
2611	1,362.99	32.28455552	-103.84539894	41.41	35.98	0.06	0.53	-5.43
2612	1,363.51	32.28455474	-103.84539826	42.42	36.13	0.08	0.50	-6.29
2613	1,364.03	32.28455518	-103.84539859	43.44	35.31	0.12	0.57	-8.13
2614	1,364.56	32.28455558	-103.84539890	42.66	35.51	0.11	0.57	-7.15
2615	1,365.08	32.28455584	-103.84539910	43.67	36.95	0.10	0.49	-6.72
2616	1,365.60	32.28455602	-103.84539933	43.87	37.89	0.13	0.54	-5.98
2617	1,366.12	32.28455595	-103.84539964	41.64	35.82	0.09	0.60	-5.82
2618	1,366.64	32.28455562	-103.84539906	38.48	33.71	0.05	0.54	-4.77

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2619	1,367.16	32.28455478	-103.84539684	34.96	32.70	0.08	0.37	-2.27
2620	1,367.68	32.28455348	-103.84539341	29.26	29.84	0.03	0.27	0.59
2621	1,368.21	32.28455154	-103.84538837	31.13	31.25	0.04	0.31	0.12
2622	1,368.73	32.28454996	-103.84538258	31.37	28.16	0.04	0.36	-3.20
2623	1,369.25	32.28454871	-103.84537612	32.70	25.59	0.05	0.47	-7.11
2624	1,369.78	32.28454778	-103.84537001	34.06	27.81	0.05	0.49	-6.25
2625	1,370.30	32.28454705	-103.84536408	34.69	33.20	0.05	0.45	-1.49
2626	1,370.82	32.28454670	-103.84535807	33.32	33.20	0.05	0.37	-0.12
2627	1,371.34	32.28454652	-103.84535205	33.24	32.89	0.01	0.28	-0.35
2628	1,371.86	32.28454670	-103.84534608	32.93	32.11	0.04	0.31	-0.82
2629	1,372.39	32.28454700	-103.84534012	33.48	31.13	0.01	0.32	-2.34
2630	1,372.91	32.28454696	-103.84533353	34.18	31.13	0.08	0.37	-3.05
2631	1,373.43	32.28454686	-103.84532684	34.65	32.62	0.05	0.33	-2.03
2632	1,373.95	32.28454655	-103.84532029	34.22	33.71	0.04	0.36	-0.51
2633	1,374.48	32.28454621	-103.84531377	36.02	35.94	0.03	0.31	-0.08
2634	1,375.00	32.28454567	-103.84530758	34.34	34.88	0.01	0.31	0.55
2635	1,375.52	32.28454513	-103.84530143	35.35	33.52	0.05	0.36	-1.84
2636	1,376.04	32.28454462	-103.84529561	36.41	34.65	0.02	0.31	-1.76
2637	1,376.57	32.28454405	-103.84528966	36.37	35.47	0.08	0.34	-0.90
2638	1,377.09	32.28454331	-103.84528376	36.02	31.76	0.04	0.35	-4.26
2639	1,377.61	32.28454259	-103.84527770	33.87	30.70	0.04	0.36	-3.16
2640	1,378.13	32.28454198	-103.84527145	32.73	31.02	0.05	0.34	-1.72
2641	1,378.66	32.28454129	-103.84526516	29.14	28.05	0.04	0.35	-1.09
2642	1,379.18	32.28454053	-103.84525917	25.59	25.74	0.10	0.34	0.16
2643	1,379.70	32.28453982	-103.84525297	24.22	23.05	0.06	0.32	-1.17
2644	1,380.22	32.28453918	-103.84524664	23.01	22.66	0.08	0.37	-0.35
2645	1,380.74	32.28453861	-103.84524066	22.97	22.54	0.06	0.33	-0.43
2646	1,381.26	32.28453808	-103.84523495	21.02	20.47	0.02	0.31	-0.55
2647	1,381.79	32.28453757	-103.84522889	20.82	20.43	0.05	0.32	-0.39
2648	1,382.31	32.28453711	-103.84522284	20.66	20.78	0.04	0.30	0.12
2649	1,382.83	32.28453601	-103.84521675	20.39	23.87	0.09	0.32	3.48
2650	1,383.35	32.28453467	-103.84521068	22.66	26.45	0.05	0.28	3.79
2651	1,383.88	32.28453216	-103.84520561	23.59	28.20	0.04	0.29	4.61
2652	1,384.40	32.28452936	-103.84520080	28.48	33.24	0.04	0.30	4.77
2653	1,384.92	32.28452579	-103.84519616	32.70	39.53	0.02	0.27	6.84
2654	1,385.43	32.28452214	-103.84519158	35.39	24.26	0.05	0.25	-11.13
2655	1,385.96	32.28451904	-103.84518643	42.77	11.06	0.03	0.28	-31.72
2656	1,386.49	32.28451603	-103.84518118	34.81	14.88	0.04	0.28	-19.92
2657	1,387.01	32.28451436	-103.84517500	28.56	28.48	0.04	0.30	-0.08
2658	1,387.53	32.28451290	-103.84516877	21.72	27.93	0.02	0.28	6.21
2659	1,388.06	32.28451265	-103.84516213	19.14	24.81	0.04	0.25	5.66
2660	1,388.57	32.28451271	-103.84515554	18.24	21.95	0.03	0.27	3.71
2661	1,389.10	32.28451382	-103.84514889	16.88	19.73	0.02	0.27	2.85
2662	1,389.62	32.28451579	-103.84514335	16.99	16.64	0.02	0.29	-0.35
2663	1,390.14	32.28451971	-103.84514030	16.17	17.66	0.03	0.28	1.48
2664	1,390.66	32.28452352	-103.84513976	15.27	17.46	0.02	0.27	2.19
2665	1,391.19	32.28452718	-103.84514314	15.12	17.73	0.03	0.29	2.62
2666	1,391.71	32.28452946	-103.84514783	15.12	16.60	0.02	0.27	1.49
2667	1,392.23	32.28453024	-103.84515394	16.06	17.03	0.01	0.28	0.98
2668	1,392.75	32.28453040	-103.84516009	17.23	18.44	0.01	0.25	1.21
2669	1,393.28	32.28453007	-103.84516628	15.31	18.13	0.06	0.26	2.81
2670	1,393.80	32.28452969	-103.84517238	31.41	9.26	0.05	0.33	-22.15
2671	1,394.32	32.28452929	-103.84517845	50.86	14.73	0.03	0.30	-36.13
2672	1,394.84	32.28452897	-103.84518433	51.76	17.46	0.04	0.29	-34.30
2673	1,395.36	32.28452867	-103.84519014	34.65	11.99	0.01	0.27	-22.66
2674	1,395.89	32.28452869	-103.84519534	30.08	24.06	0.05	0.28	-6.02
2675	1,396.41	32.28452878	-103.84520042	24.30	30.55	0.04	0.27	6.25
2676	1,396.92	32.28452910	-103.84520320	22.42	28.56	0.03	0.28	6.13
2677	1,397.44	32.28452945	-103.84520574	21.45	25.74	0.05	0.29	4.30
2678	1,397.97	32.28452912	-103.84520690	20.23	24.45	0.03	0.28	4.22
2679	1,398.50	32.28452881	-103.84520791	20.27	24.57	0.05	0.30	4.30
2680	1,399.02	32.28452918	-103.84520770	20.66	24.34	0.06	0.29	3.67
2681	1,399.54	32.28452976	-103.84520774	21.02	23.98	0.05	0.30	2.97
2682	1,400.06	32.28453139	-103.84520909	21.64	26.17	0.06	0.29	4.53
2683	1,400.59	32.28453337	-103.84521128	21.84	25.78	0.07	0.30	3.95
2684	1,401.11	32.28453643	-103.84521605	20.63	23.91	0.05	0.29	3.28
2685	1,401.63	32.28453874	-103.84522128	19.92	24.02	0.05	0.30	4.10
2686	1,402.15	32.28453951	-103.84522751	20.27	21.99	0.01	0.28	1.72
2687	1,402.67	32.28454004	-103.84523396	21.41	22.19	0.06	0.30	0.78
2688	1,403.20	32.28454022	-103.84524070	22.38	21.17	0.08	0.28	-1.21
2689	1,403.72	32.28454062	-103.84524775	22.27	21.52	0.09	0.31	-0.74
2690	1,404.24	32.28454125	-103.84525507	24.92	24.45	0.07	0.33	-0.47
2691	1,404.76	32.28454211	-103.84526253	27.38	25.98	0.05	0.33	-1.41
2692	1,405.29	32.28454313	-103.84527010	30.23	28.52	0.06	0.30	-1.72
2693	1,405.81	32.28454431	-103.84527724	32.81	30.27	0.03	0.30	-2.54
2694	1,406.33	32.28454558	-103.84528416	33.56	31.45	0.07	0.34	-2.11
2695	1,406.85	32.28454667	-103.84529091	33.44	33.05	0.02	0.32	-0.39

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2696	1,407.38	32.28454771	-103.84529761	32.42	34.92	0.09	0.33	2.50
2697	1,407.90	32.28454864	-103.84530436	33.83	33.56	0.06	0.32	-0.27
2698	1,408.42	32.28454956	-103.84531111	31.68	35.59	0.12	0.34	3.91
2699	1,408.94	32.28455020	-103.84531791	31.41	33.67	0.06	0.35	2.27
2700	1,409.47	32.28455082	-103.84532476	30.66	33.83	0.06	0.33	3.16
2701	1,409.99	32.28455147	-103.84533136	29.92	31.02	0.05	0.33	1.09
2702	1,410.51	32.28455218	-103.84533804	28.28	30.55	0.02	0.37	2.27
2703	1,411.03	32.28455344	-103.84534507	28.32	32.38	0.05	0.37	4.06
2704	1,411.56	32.28455471	-103.84535206	28.28	32.42	0.02	0.33	4.14
2705	1,412.08	32.28455590	-103.84535842	27.73	34.30	0.08	0.38	6.56
2706	1,412.60	32.28455718	-103.84536482	28.59	34.22	0.04	0.39	5.63
2707	1,413.12	32.28455862	-103.84537105	25.86	31.02	0.11	0.51	5.16
2708	1,413.64	32.28455974	-103.84537738	26.64	28.20	0.08	0.49	1.56
2709	1,414.16	32.28456025	-103.84538382	25.98	23.95	0.06	0.46	-2.03
2710	1,414.69	32.28456059	-103.84539029	29.26	24.73	0.07	0.41	-4.53
2711	1,415.21	32.28456072	-103.84539679	31.56	23.63	0.08	0.17	-7.93
2712	1,415.73	32.28456104	-103.84540362	32.42	23.67	0.06	0.33	-8.75
2713	1,416.25	32.28456154	-103.84541081	34.84	27.66	0.07	0.49	-7.19
2714	1,416.78	32.28456185	-103.84541827	33.95	27.42	0.17	1.02	-6.52
2715	1,417.30	32.28456203	-103.84542590	38.16	32.58	0.67	3.42	-5.59
2716	1,417.82	32.28456213	-103.84543270	94.92	78.63	5.03	19.71	-16.29
2717	1,418.34	32.28456219	-103.84543916	-27.15	-113.40	-4.14	-20.53	-86.25
2718	1,418.86	32.28456249	-103.84544463	26.41	-233.32	3.55	-36.89	-259.73
2719	1,419.39	32.28456286	-103.84544984	-6.72	-271.17	9.22	-36.89	-264.45
2720	1,419.91	32.28456354	-103.84545463	14.61	-261.95	9.22	-36.89	-276.56
2721	1,420.43	32.28456426	-103.84545933	-9.65	-268.01	2.39	-36.89	-258.36
2722	1,420.95	32.28456523	-103.84546307	35.12	-265.82	-7.97	-36.89	-300.94
2723	1,421.47	32.28456623	-103.84546672	141.91	-268.67	6.45	-36.89	-410.59
2724	1,422.00	32.28456751	-103.84546865	95.78	6.45	6.32	27.14	-89.34
2725	1,422.52	32.28456865	-103.84547030	76.88	97.93	5.10	36.89	21.06
2726	1,423.04	32.28456864	-103.84546981	73.16	121.06	4.86	36.89	47.89
2727	1,423.56	32.28456888	-103.84546973	66.17	125.00	4.50	36.89	58.83
2728	1,424.09	32.28457012	-103.84547124	55.47	118.75	3.51	36.89	63.28
2729	1,424.61	32.28457164	-103.84547257	47.03	83.24	2.60	24.01	36.21
2730	1,425.13	32.28457386	-103.84547346	42.34	62.27	2.21	17.00	19.92
2731	1,425.65	32.28457601	-103.84547403	38.71	52.42	1.85	13.07	13.71
2732	1,426.18	32.28457806	-103.84547405	32.70	40.31	1.24	8.53	7.62
2733	1,426.70	32.28457964	-103.84547420	29.49	33.79	1.00	6.56	4.30
2734	1,427.22	32.28458067	-103.84547451	28.56	32.58	0.96	6.08	4.02
2735	1,427.74	32.28458209	-103.84547513	30.94	35.43	1.04	6.13	4.49
2736	1,428.26	32.28458385	-103.84547602	27.07	28.71	0.92	5.35	1.64
2737	1,428.79	32.28458485	-103.84547575	27.85	30.20	0.91	4.87	2.34
2738	1,429.31	32.28458541	-103.84547480	31.64	30.66	1.12	5.67	-0.98
2739	1,429.83	32.28458747	-103.84547445	43.79	41.25	1.77	8.24	-2.54
2740	1,430.35	32.28459015	-103.84547436	41.60	44.92	1.72	8.07	3.32
2741	1,430.87	32.28459063	-103.84547348	29.61	33.28	0.96	5.54	3.67
2742	1,431.40	32.28459056	-103.84547241	22.54	27.54	0.54	4.41	5.00
2743	1,431.92	32.28459188	-103.84547067	19.45	24.18	0.32	3.26	4.73
2744	1,432.43	32.28459337	-103.84546885	18.44	21.41	0.19	2.13	2.97
2745	1,432.96	32.28459536	-103.84546720	19.65	19.38	0.18	1.52	-0.27
2746	1,433.49	32.28459741	-103.84546558	26.29	22.89	0.14	1.17	-3.40
2747	1,434.01	32.28460016	-103.84546455	21.06	25.90	-0.02	0.94	4.84
2748	1,434.53	32.28460278	-103.84546343	65.70	22.70	0.07	0.51	-43.01
2749	1,435.06	32.28460463	-103.84546168	125.27	59.06	0.60	1.38	-66.21
2750	1,435.58	32.28460650	-103.84546011	90.86	115.86	0.47	2.66	25.00
2751	1,436.10	32.28460858	-103.84545903	60.70	103.75	0.31	2.47	43.05
2752	1,436.62	32.28461006	-103.84545817	46.48	81.84	0.23	1.96	35.35
2753	1,437.14	32.28461015	-103.84545783	45.35	77.77	0.21	1.87	32.42
2754	1,437.66	32.28461030	-103.84545753	49.34	80.12	0.24	1.93	30.78
2755	1,438.19	32.28461053	-103.84545731	54.53	78.44	0.28	1.87	23.91
2756	1,438.71	32.28461089	-103.84545595	70.86	83.91	0.39	2.02	13.05
2757	1,439.23	32.28461138	-103.84545330	102.19	103.09	0.54	2.49	0.90
2758	1,439.75	32.28461109	-103.84545022	144.06	142.73	0.67	3.24	-1.33
2759	1,440.28	32.28461017	-103.84544676	129.61	167.54	0.59	3.65	37.93
2760	1,440.80	32.28460885	-103.84544344	71.02	147.89	0.31	3.12	76.88
2761	1,441.32	32.28460731	-103.84544015	35.94	90.78	0.16	1.91	54.84
2762	1,441.83	32.28460639	-103.84543714	24.26	53.36	0.11	1.22	29.10
2763	1,442.37	32.28460568	-103.84543410	21.29	35.90	0.11	0.97	14.61
2764	1,442.89	32.28460530	-103.84543072	20.63	27.31	0.10	0.77	6.68
2765	1,443.41	32.28460499	-103.84542725	19.34	23.83	0.10	0.79	4.49
2766	1,443.92	32.28460551	-103.84542454	18.13	23.52	0.09	0.76	5.39
2767	1,444.44	32.28460612	-103.84542191	16.64	22.15	0.06	0.67	5.51
2768	1,444.97	32.28460679	-103.84541823	15.86	20.94	0.05	0.50	5.08
2769	1,445.50	32.28460748	-103.84541460	15.12	16.95	0.04	0.40	1.84
2770	1,446.02	32.28460819	-103.84541223	14.34	15.43	0.03	0.30	1.09
2771	1,446.55	32.28460878	-103.84541020	14.02	15.08	0.04	0.24	1.06
2772	1,447.06	32.28460868	-103.84541002	14.49	16.72	0.02	0.28	2.23

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2773	1,447.59	32.28460860	-103.84540987	15.00	15.98	0.04	0.32	0.98
2774	1,448.11	32.28460854	-103.84540984	14.57	14.81	0.02	0.23	0.23
2775	1,448.63	32.28460856	-103.84540919	13.56	14.65	0.02	0.20	1.09
2776	1,449.15	32.28460876	-103.84540728	13.40	13.05	0.02	0.13	-0.35
2777	1,449.67	32.28460986	-103.84540447	14.30	12.31	0.03	0.14	-1.99
2778	1,450.20	32.28461227	-103.84540036	13.87	12.50	0.04	0.28	-1.37
2779	1,450.72	32.28461419	-103.84539730	14.45	12.73	0.01	0.19	-1.72
2780	1,451.24	32.28461561	-103.84539528	13.87	14.49	0.02	0.22	0.63
2781	1,451.77	32.28461744	-103.84539305	12.66	12.77	0.04	0.20	0.12
2782	1,452.29	32.28461955	-103.84539068	11.99	11.52	0.05	0.33	-0.47
2783	1,452.81	32.28462159	-103.84538822	14.41	13.48	0.04	0.21	-0.94
2784	1,453.33	32.28462360	-103.84538571	14.69	13.36	0.05	0.19	-1.33
2785	1,453.85	32.28462406	-103.84538314	16.76	13.48	0.06	0.23	-3.28
2786	1,454.38	32.28462400	-103.84538055	17.77	11.84	0.12	0.34	-5.94
2787	1,454.90	32.28462435	-103.84537859	17.89	13.44	0.15	0.47	-4.45
2788	1,455.42	32.28462478	-103.84537673	18.36	16.21	0.12	0.37	-2.15
2789	1,455.94	32.28462329	-103.84537477	18.40	15.55	0.10	0.36	-2.85
2790	1,456.46	32.28462162	-103.84537280	21.56	15.66	0.16	0.53	-5.90
2791	1,456.98	32.28461881	-103.84537124	31.21	16.25	0.26	0.89	-14.96
2792	1,457.51	32.28461600	-103.84536983	40.98	24.34	0.34	1.23	-16.64
2793	1,458.03	32.28461342	-103.84536987	58.52	46.29	0.47	1.72	-12.23
2794	1,458.56	32.28461077	-103.84536955	60.66	61.95	0.41	1.79	1.29
2795	1,459.07	32.28460800	-103.84536768	62.19	67.62	0.40	1.77	5.43
2796	1,459.60	32.28460550	-103.84536577	65.70	86.88	0.35	1.71	21.17
2797	1,460.12	32.28460388	-103.84536383	57.97	93.63	0.24	1.41	35.66
2798	1,460.64	32.28460189	-103.84536213	49.30	85.66	0.14	1.01	36.37
2799	1,461.16	32.28459923	-103.84536087	44.65	78.28	0.08	0.81	33.63
2800	1,461.68	32.28459749	-103.84535912	41.29	72.11	0.06	0.71	30.82
2801	1,462.21	32.28459695	-103.84535672	37.62	64.49	0.04	0.59	26.88
2802	1,462.73	32.28459599	-103.84535437	35.59	59.06	0.03	0.50	23.48
2803	1,463.25	32.28459462	-103.84535204	33.79	53.20	0.04	0.31	19.41
2804	1,463.77	32.28459543	-103.84534896	33.48	49.14	0.06	0.15	15.66
2805	1,464.30	32.28459768	-103.84534538	36.48	50.23	0.07	0.10	13.75
2806	1,464.82	32.28460072	-103.84534187	40.20	54.61	0.06	0.09	14.41
2807	1,465.34	32.28460412	-103.84533839	39.06	53.91	0.15	0.19	14.84
2808	1,465.86	32.28460673	-103.84533674	33.87	40.86	0.16	0.23	6.99
2809	1,466.38	32.28460911	-103.84533561	23.09	19.38	0.20	0.28	-3.71
2810	1,466.91	32.28461108	-103.84533467	20.51	11.33	0.16	0.35	-9.18
2811	1,467.43	32.28461298	-103.84533377	19.73	12.23	0.15	0.39	-7.50
2812	1,467.95	32.28461373	-103.84533297	17.70	12.77	0.11	0.37	-4.92
2813	1,468.47	32.28461443	-103.84533213	20.51	13.67	0.13	0.44	-6.84
2814	1,469.00	32.28461520	-103.84532945	22.77	6.41	0.13	0.38	-16.37
2815	1,469.52	32.28461557	-103.84532723	22.46	2.27	0.11	0.32	-20.20
2816	1,470.04	32.28461267	-103.84532866	24.41	2.50	0.14	0.29	-21.91
2817	1,470.56	32.28460935	-103.84532983	29.53	11.48	0.12	0.31	-18.05
2818	1,471.08	32.28460432	-103.84532992	34.61	42.54	0.05	0.37	7.93
2819	1,471.61	32.28460020	-103.84533026	34.14	55.16	0.03	0.33	21.02
2820	1,472.13	32.28459847	-103.84533123	32.66	54.10	0.02	0.34	21.45
2821	1,472.65	32.28459664	-103.84533071	31.88	50.63	0.03	0.34	18.75
2822	1,473.17	32.28459462	-103.84532759	30.39	44.96	0.06	0.36	14.57
2823	1,473.70	32.28459297	-103.84532405	29.77	43.56	0.06	0.42	13.79
2824	1,474.22	32.28459180	-103.84532000	28.44	41.95	0.04	0.44	13.52
2825	1,474.74	32.28459247	-103.84531584	28.95	42.85	0.04	0.34	13.91
2826	1,475.26	32.28459470	-103.84531162	28.32	40.12	0.05	0.26	11.80
2827	1,475.78	32.28459775	-103.84530911	28.59	35.35	0.09	0.10	6.76
2828	1,476.31	32.28460129	-103.84530766	24.65	23.36	0.10	-0.04	-1.29
2829	1,476.83	32.28460516	-103.84530565	20.20	15.31	0.09	0.16	-4.88
2830	1,477.35	32.28460917	-103.84530340	19.65	14.96	0.09	0.18	-4.69
2831	1,477.87	32.28461140	-103.84530280	19.53	15.20	0.06	0.27	-4.34
2832	1,478.40	32.28461316	-103.84530263	18.87	13.48	0.04	0.28	-5.39
2833	1,478.92	32.28461382	-103.84530209	17.46	12.42	0.04	0.22	-5.04
2834	1,479.44	32.28461432	-103.84530151	16.99	11.99	0.03	0.17	-5.00
2835	1,479.96	32.28461608	-103.84529852	16.21	11.91	0.04	0.19	-4.30
2836	1,480.48	32.28461783	-103.84529544	15.55	10.23	0.04	0.20	-5.31
2837	1,481.01	32.28461822	-103.84529291	18.20	13.63	0.04	0.13	-4.57
2838	1,481.53	32.28461887	-103.84529038	18.59	15.43	0.03	0.12	-3.16
2839	1,482.05	32.28462118	-103.84528787	18.13	15.66	0.02	0.10	-2.46
2840	1,482.57	32.28462314	-103.84528510	18.09	19.41	0.02	0.06	1.33
2841	1,483.10	32.28462389	-103.84528136	17.34	20.59	0.02	0.10	3.24
2842	1,483.62	32.28462461	-103.84527758	16.09	18.20	0.02	0.10	2.11
2843	1,484.14	32.28462529	-103.84527372	15.94	18.44	0.03	0.13	2.50
2844	1,484.66	32.28462569	-103.84527006	16.13	16.80	0.03	0.09	0.66
2845	1,485.19	32.28462565	-103.84526699	16.09	16.91	0.05	0.07	0.82
2846	1,485.71	32.28462503	-103.84526358	15.86	15.82	0.03	0.10	-0.04
2847	1,486.23	32.28462377	-103.84526076	18.05	19.10	0.04	0.03	1.06
2848	1,486.75	32.28462248	-103.84525834	19.26	20.51	0.04	0.08	1.25
2849	1,487.27	32.28462117	-103.84525623	18.67	19.84	0.02	0.03	1.17

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2850	1,487.80	32.28461878	-103.84525524	21.02	22.89	0.02	0.03	1.88
2851	1,488.32	32.28461580	-103.84525488	25.23	29.34	0.02	0.05	4.10
2852	1,488.84	32.28461371	-103.84525483	21.45	23.24	0.02	0.20	1.80
2853	1,489.36	32.28461195	-103.84525488	20.20	18.56	0.04	0.27	-1.64
2854	1,489.89	32.28461037	-103.84525531	21.25	17.50	0.06	0.29	-3.75
2855	1,490.41	32.28460882	-103.84525582	20.74	14.26	0.06	0.24	-6.48
2856	1,490.92	32.28460784	-103.84525837	22.11	15.20	0.06	0.28	-6.91
2857	1,491.44	32.28460692	-103.84526115	22.77	16.60	0.08	0.25	-6.17
2858	1,491.97	32.28460601	-103.84526550	23.28	16.95	0.11	0.31	-6.33
2859	1,492.50	32.28460499	-103.84526986	26.80	20.39	0.12	0.37	-6.41
2860	1,493.03	32.28460258	-103.84527361	26.99	16.84	0.13	0.47	-10.16
2861	1,493.54	32.28460042	-103.84527695	29.77	24.57	0.07	0.48	-5.20
2862	1,494.06	32.28459913	-103.84527873	31.41	38.83	0.03	0.46	7.42
2863	1,494.58	32.28459800	-103.84528010	31.48	45.27	0.02	0.46	13.79
2864	1,495.11	32.28459732	-103.84528018	31.68	43.56	0.03	0.43	11.88
2865	1,495.63	32.28459665	-103.84527993	32.15	44.45	0.04	0.41	12.31
2866	1,496.15	32.28459597	-103.84527901	32.77	46.64	0.03	0.36	13.87
2867	1,496.67	32.28459475	-103.84527748	32.46	46.72	0.03	0.35	14.26
2868	1,497.20	32.28459274	-103.84527504	31.72	46.95	0.03	0.35	15.23
2869	1,497.72	32.28459144	-103.84527302	32.66	48.71	0.02	0.34	16.06
2870	1,498.24	32.28459085	-103.84527144	32.46	47.62	0.01	0.34	15.16
2871	1,498.76	32.28459054	-103.84527086	31.45	45.70	0.02	0.38	14.26
2872	1,499.29	32.28459041	-103.84527101	32.07	47.07	0.02	0.37	15.00
2873	1,499.81	32.28459078	-103.84527139	30.31	43.28	0.02	0.29	12.97
2874	1,500.33	32.28459141	-103.84527191	28.98	38.63	0.04	0.10	9.65
2875	1,500.85	32.28459254	-103.84526801	29.38	38.20	0.04	0.01	8.83
2876	1,501.38	32.28459384	-103.84526266	27.38	35.16	0.02	0.10	7.77
2877	1,501.90	32.28459498	-103.84526079	26.06	34.73	0.00	0.19	8.67
2878	1,502.42	32.28459609	-103.84525958	25.74	35.47	0.03	0.21	9.73
2879	1,502.94	32.28459692	-103.84526032	25.16	34.81	0.04	0.21	9.65
2880	1,503.46	32.28459771	-103.84526122	22.70	27.34	0.04	0.13	4.65
2881	1,503.98	32.28459727	-103.84526114	23.24	28.67	0.04	0.14	5.43
2882	1,504.51	32.28459688	-103.84526106	25.00	30.70	0.05	0.20	5.70
2883	1,505.03	32.28459694	-103.84526100	26.45	32.11	0.09	0.33	5.66
2884	1,505.56	32.28459696	-103.84526087	26.84	31.13	0.13	0.40	4.30
2885	1,506.07	32.28459675	-103.84526051	29.18	32.66	0.17	0.40	3.48
2886	1,506.60	32.28459647	-103.84526024	29.34	32.07	0.17	0.36	2.73
2887	1,507.12	32.28459600	-103.84526025	26.76	32.27	0.09	0.21	5.51
2888	1,507.64	32.28459550	-103.84525929	25.59	31.25	0.06	0.13	5.66
2889	1,508.16	32.28459495	-103.84525650	24.26	22.46	0.06	-0.15	-1.80
2890	1,508.69	32.28459375	-103.84525494	26.48	32.81	0.02	0.14	6.33
2891	1,509.21	32.28459168	-103.84525497	30.00	40.98	0.03	0.29	10.98
2892	1,509.73	32.28459073	-103.84525506	32.19	45.35	0.04	0.36	13.16
2893	1,510.25	32.28459082	-103.84525520	32.42	47.11	0.03	0.36	14.69
2894	1,510.77	32.28459125	-103.84525435	30.86	42.07	0.03	0.26	11.21
2895	1,511.30	32.28459193	-103.84525283	29.73	37.42	0.04	0.07	7.70
2896	1,511.82	32.28459304	-103.84525013	26.88	31.33	0.05	-0.03	4.45
2897	1,512.34	32.28459436	-103.84524687	21.09	19.49	0.10	0.09	-1.60
2898	1,512.86	32.28459758	-103.84524432	18.44	11.84	0.10	0.07	-6.60
2899	1,513.39	32.28460137	-103.84524197	17.11	6.91	0.09	0.05	-10.20
2900	1,513.91	32.28460468	-103.84523923	18.63	11.41	0.06	0.06	-7.23
2901	1,514.43	32.28460794	-103.84523640	20.78	16.25	0.06	-0.01	-4.53
2902	1,514.95	32.28460980	-103.84523197	19.77	16.56	0.04	-0.15	-3.20
2903	1,515.47	32.28461160	-103.84522745	19.18	16.88	0.05	-0.16	-2.31
2904	1,516.00	32.28461417	-103.84522373	19.49	19.30	0.06	-0.03	-0.20
2905	1,516.52	32.28461667	-103.84522006	17.70	17.27	0.05	-0.03	-0.43
2906	1,517.04	32.28461857	-103.84521699	17.34	16.84	0.04	-0.06	-0.51
2907	1,517.56	32.28462032	-103.84521406	16.95	15.47	0.03	0.00	-1.48
2908	1,518.08	32.28462148	-103.84521164	17.31	16.02	0.04	0.07	-1.29
2909	1,518.61	32.28462194	-103.84520984	17.15	18.16	0.06	0.14	1.02
2910	1,519.13	32.28462064	-103.84520962	17.62	17.23	0.04	-0.01	-0.39
2911	1,519.65	32.28461871	-103.84520863	18.44	16.76	0.03	-0.01	-1.68
2912	1,520.17	32.28461577	-103.84520637	20.20	20.70	0.02	0.00	0.51
2913	1,520.69	32.28461326	-103.84520466	21.64	23.24	0.03	0.06	1.60
2914	1,521.22	32.28461129	-103.84520362	22.31	26.80	0.03	0.04	4.49
2915	1,521.74	32.28460990	-103.84520204	24.69	29.10	0.02	0.10	4.41
2916	1,522.26	32.28460904	-103.84520001	24.81	29.18	0.02	0.12	4.38
2917	1,522.79	32.28460777	-103.84519905	23.79	28.09	0.03	0.13	4.30
2918	1,523.31	32.28460625	-103.84519873	22.50	24.14	0.03	0.13	1.64
2919	1,523.83	32.28460445	-103.84519757	22.73	23.87	0.04	0.17	1.13
2920	1,524.35	32.28460252	-103.84519605	22.46	20.70	0.05	0.25	-1.76
2921	1,524.87	32.28460020	-103.84519500	21.06	12.54	0.08	0.37	-8.52
2922	1,525.40	32.28459779	-103.84519407	21.68	11.29	0.08	0.33	-10.39
2923	1,525.92	32.28459474	-103.84519145	22.38	13.67	0.08	0.38	-8.71
2924	1,526.44	32.28459161	-103.84518859	27.81	26.17	0.08	0.33	-1.64
2925	1,526.96	32.28458975	-103.84518407	27.81	33.91	0.06	0.31	6.09
2926	1,527.48	32.28458796	-103.84517945	27.62	33.52	0.06	0.32	5.90

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
2927	1,528.01	32.28458663	-103.84517494	27.62	36.09	0.05	0.30	8.48
2928	1,528.53	32.28458582	-103.84517073	26.37	35.70	0.05	0.23	9.34
2929	1,529.05	32.28458820	-103.84516837	25.00	30.27	0.08	0.23	5.27
2930	1,529.57	32.28459051	-103.84516594	23.40	24.18	0.10	0.27	0.78
2931	1,530.10	32.28459255	-103.84516329	21.25	16.95	0.07	0.30	-4.30
2932	1,530.62	32.28459492	-103.84516086	20.04	15.08	0.05	0.26	-4.96
2933	1,531.14	32.28459805	-103.84515893	18.83	15.04	0.03	0.19	-3.79
2934	1,531.66	32.28460108	-103.84515681	18.63	16.09	0.02	0.16	-2.54
2935	1,532.18	32.28460393	-103.84515438	19.57	19.49	0.02	0.15	-0.08
2936	1,532.71	32.28460604	-103.84515144	18.98	18.48	0.02	0.07	-0.51
2937	1,533.23	32.28460731	-103.84514795	17.93	16.33	0.03	0.04	-1.60
2938	1,533.75	32.28460958	-103.84514455	17.19	15.86	0.07	0.02	-1.33
2939	1,534.27	32.28461264	-103.84514124	17.73	15.04	0.05	-0.09	-2.70
2940	1,534.80	32.28461511	-103.84513738	17.46	15.00	0.04	-0.04	-2.46
2941	1,535.32	32.28461725	-103.84513325	16.52	15.12	0.04	-0.02	-1.41
2942	1,535.84	32.28461809	-103.84512996	16.21	13.52	0.03	-0.01	-2.70
2943	1,536.36	32.28461844	-103.84512698	15.78	13.75	0.03	-0.06	-2.03
2944	1,536.89	32.28461816	-103.84512407	16.37	14.41	0.02	-0.03	-1.95
2945	1,537.41	32.28461774	-103.84512116	17.03	15.43	0.01	-0.06	-1.60
2946	1,537.92	32.28461522	-103.84512008	17.54	15.59	0.01	-0.03	-1.95
2947	1,538.44	32.28461247	-103.84511921	18.91	16.99	0.01	-0.04	-1.91
2948	1,538.97	32.28460936	-103.84511842	19.18	19.38	0.01	0.05	0.20
2949	1,539.50	32.28460630	-103.84511777	19.22	19.02	-0.01	0.10	-0.20
2950	1,540.02	32.28460484	-103.84511868	18.75	17.07	-0.01	0.14	-1.68
2951	1,540.54	32.28460353	-103.84511958	21.06	19.02	0.00	0.16	-2.03
2952	1,541.06	32.28460318	-103.84512028	22.11	18.95	-0.01	0.13	-3.16
2953	1,541.59	32.28460287	-103.84512085	23.16	19.77	0.00	0.20	-3.40
2954	1,542.11	32.28460269	-103.84512101	22.66	19.65	0.00	0.17	-3.01
2955	1,542.63	32.28460221	-103.84512076	22.23	19.45	0.01	0.17	-2.77
2956	1,543.15	32.28460108	-103.84511968	23.56	20.39	0.01	0.16	-3.16
2957	1,543.67	32.28459956	-103.84511997	20.82	18.13	0.03	0.10	-2.70
2958	1,544.19	32.28459747	-103.84512230	21.99	21.56	0.05	0.09	-0.43
2959	1,544.72	32.28459609	-103.84512616	22.42	23.16	0.04	0.06	0.74
2960	1,545.24	32.28459544	-103.84513157	22.11	24.38	0.06	0.19	2.27
2961	1,545.76	32.28459544	-103.84513667	21.95	24.61	0.05	0.16	2.66
2962	1,546.29	32.28459592	-103.84514154	21.76	25.59	0.03	0.14	3.83
2963	1,546.81	32.28459741	-103.84514682	21.56	22.89	0.04	0.13	1.33
2964	1,547.33	32.28459942	-103.84515237	21.02	22.97	0.03	0.11	1.95
2965	1,547.85	32.28460241	-103.84515720	19.49	20.51	0.03	0.08	1.02
2966	1,548.37	32.28460573	-103.84516180	19.77	21.33	0.02	-0.01	1.56
2967	1,548.89	32.28460805	-103.84516738	20.47	22.03	0.04	0.05	1.56
2968	1,549.42	32.28461019	-103.84517320	21.09	22.85	0.04	-0.02	1.76
2969	1,549.94	32.28461037	-103.84517873	21.45	24.88	0.02	-0.05	3.44
2970	1,550.46	32.28461037	-103.84518425	20.74	23.40	0.02	-0.03	2.66
2971	1,550.98	32.28461051	-103.84518958	21.13	23.09	0.03	0.02	1.95
2972	1,551.51	32.28461063	-103.84519496	21.25	23.59	0.02	-0.02	2.34
2973	1,552.03	32.28461059	-103.84520076	21.09	21.88	0.02	-0.14	0.78
2974	1,552.55	32.28461015	-103.84520635	22.07	22.31	0.04	-0.18	0.23
2975	1,553.07	32.28460784	-103.84521089	21.02	18.56	0.09	-0.15	-2.46
2976	1,553.60	32.28460529	-103.84521540	18.63	13.05	0.09	-0.15	-5.59
2977	1,554.12	32.28460212	-103.84521972	17.73	9.61	0.11	-0.19	-8.13
2978	1,554.64	32.28459909	-103.84522380	17.62	7.58	0.09	-0.04	-10.04
2979	1,555.16	32.28459641	-103.84522736	23.09	18.24	0.05	0.17	-4.84
2980	1,555.68	32.28459402	-103.84523100	25.20	22.15	0.04	0.27	-3.05
2981	1,556.21	32.28459204	-103.84523472	25.94	25.86	0.04	0.25	-0.08
2982	1,556.73	32.28459080	-103.84523847	29.02	35.43	0.04	0.17	6.41
2983	1,557.25	32.28459025	-103.84524225	28.48	35.98	0.05	0.14	7.50
2984	1,557.77	32.28459021	-103.84524615	27.73	33.95	0.04	0.08	6.21
2985	1,558.30	32.28459051	-103.84525013	28.28	36.45	0.04	0.06	8.16
2986	1,558.82	32.28459098	-103.84525437	26.64	33.28	0.04	0.08	6.64
2987	1,559.34	32.28459154	-103.84525876	26.72	33.48	0.04	0.02	6.76
2988	1,559.86	32.28459208	-103.84526273	27.81	36.29	0.03	0.09	8.48
2989	1,560.39	32.28459262	-103.84526660	27.97	35.94	0.03	0.18	7.97
2990	1,560.91	32.28459300	-103.84526834	30.20	39.88	0.03	0.28	9.69
2991	1,561.43	32.28459336	-103.84526973	31.48	43.63	0.03	0.30	12.15
2992	1,561.95	32.28459331	-103.84527047	30.98	42.23	0.02	0.23	11.25
2993	1,562.47	32.28459324	-103.84527127	29.10	37.58	0.03	0.17	8.48
2994	1,563.00	32.28459360	-103.84527538	29.49	37.62	0.03	0.15	8.13
2995	1,563.52	32.28459404	-103.84527951	31.45	42.27	0.04	0.11	10.82
2996	1,564.04	32.28459522	-103.84528407	29.69	37.77	0.05	0.13	8.09
2997	1,564.56	32.28459658	-103.84528864	28.24	34.34	0.06	0.07	6.09
2998	1,565.08	32.28459867	-103.84529323	30.08	37.66	0.09	0.04	7.58
2999	1,565.61	32.28460039	-103.84529740	29.14	35.23	0.08	0.18	6.09
3000	1,566.13	32.28460114	-103.84530035	29.73	36.45	0.08	0.22	6.72
3001	1,566.65	32.28460165	-103.84530328	30.82	38.98	0.06	0.23	8.16
3002	1,567.17	32.28460176	-103.84530611	33.87	43.75	0.06	0.20	9.88
3003	1,567.70	32.28460140	-103.84530885	34.53	45.59	0.05	0.23	11.06

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3004	1,568.22	32.28460049	-103.84531149	34.84	47.46	0.04	0.17	12.62
3005	1,568.74	32.28460047	-103.84531498	35.27	49.53	0.04	0.17	14.26
3006	1,569.26	32.28460121	-103.84531920	37.54	54.22	0.05	0.16	16.68
3007	1,569.78	32.28460258	-103.84532256	38.63	56.13	0.06	0.22	17.50
3008	1,570.31	32.28460433	-103.84532541	39.57	56.41	0.06	0.17	16.84
3009	1,570.83	32.28460570	-103.84532688	42.31	58.16	0.07	0.33	15.86
3010	1,571.35	32.28460691	-103.84532777	45.16	59.81	0.07	0.26	14.65
3011	1,571.87	32.28460560	-103.84532966	45.55	58.20	0.07	0.27	12.66
3012	1,572.40	32.28460363	-103.84533180	40.51	53.36	0.05	0.20	12.85
3013	1,572.91	32.28460344	-103.84533527	38.67	59.18	0.04	0.24	20.51
3014	1,573.44	32.28460352	-103.84533893	39.45	62.50	0.03	0.24	23.05
3015	1,573.96	32.28460250	-103.84534221	39.22	59.84	0.03	0.26	20.63
3016	1,574.49	32.28460145	-103.84534547	40.20	63.56	0.04	0.25	23.36
3017	1,575.01	32.28460074	-103.84534850	41.02	62.66	0.04	0.28	21.64
3018	1,575.53	32.28460008	-103.84535160	42.54	63.48	0.05	0.24	20.94
3019	1,576.05	32.28459975	-103.84535514	44.14	65.35	0.09	0.42	21.21
3020	1,576.57	32.28459946	-103.84535804	55.00	77.58	0.17	0.69	22.58
3021	1,577.10	32.28459931	-103.84535868	65.70	86.21	0.30	0.96	20.51
3022	1,577.62	32.28459903	-103.84535996	74.38	90.86	0.39	1.00	16.48
3023	1,578.14	32.28459847	-103.84536272	80.70	92.70	0.47	1.01	11.99
3024	1,578.66	32.28459827	-103.84536561	80.23	77.62	0.61	0.97	-2.62
3025	1,579.18	32.28459863	-103.84536870	72.46	54.45	0.73	0.95	-18.01
3026	1,579.71	32.28459841	-103.84537129	58.67	34.69	0.68	1.16	-23.98
3027	1,580.23	32.28459756	-103.84537334	45.27	28.95	0.51	1.15	-16.33
3028	1,580.75	32.28459739	-103.84537661	36.76	18.20	0.33	1.16	-18.56
3029	1,581.27	32.28459776	-103.84538085	37.89	27.42	0.27	1.27	-10.47
3030	1,581.80	32.28459705	-103.84538472	39.69	42.58	0.24	1.31	2.89
3031	1,582.32	32.28459574	-103.84538839	47.89	53.52	0.32	1.58	5.63
3032	1,582.84	32.28459572	-103.84539221	59.49	69.61	0.40	1.94	10.12
3033	1,583.36	32.28459617	-103.84539613	68.05	85.70	0.45	2.29	17.66
3034	1,583.88	32.28459637	-103.84539981	63.71	90.12	0.43	2.55	26.41
3035	1,584.41	32.28459652	-103.84540346	56.99	100.27	0.42	3.10	43.28
3036	1,584.92	32.28459861	-103.84540661	47.31	96.80	0.36	3.13	49.49
3037	1,585.44	32.28460093	-103.84540972	32.58	60.55	0.22	1.97	27.97
3038	1,585.97	32.28460244	-103.84541302	25.16	40.51	0.16	1.28	15.35
3039	1,586.50	32.28460397	-103.84541633	20.12	27.38	0.10	0.81	7.27
3040	1,587.02	32.28460595	-103.84541941	18.09	21.13	0.07	0.58	3.05
3041	1,587.54	32.28460763	-103.84542251	16.80	17.62	0.06	0.46	0.82
3042	1,588.06	32.28460759	-103.84542570	16.06	14.77	0.05	0.34	-1.29
3043	1,588.59	32.28460802	-103.84542911	16.09	14.57	0.04	0.27	-1.52
3044	1,589.11	32.28460995	-103.84543314	20.31	19.02	0.06	0.36	-1.29
3045	1,589.63	32.28461148	-103.84543725	23.87	21.95	0.07	0.33	-1.91
3046	1,590.15	32.28461215	-103.84544149	33.01	31.76	0.12	0.63	-1.25
3047	1,590.68	32.28461287	-103.84544592	36.80	42.66	0.16	0.86	5.86
3048	1,591.19	32.28461361	-103.84545035	30.43	34.26	0.13	0.75	3.83
3049	1,591.72	32.28461433	-103.84545421	24.88	27.85	0.10	0.54	2.97
3050	1,592.24	32.28461502	-103.84545738	20.43	21.68	0.08	0.44	1.25
3051	1,592.76	32.28461449	-103.84546064	16.76	18.13	0.05	0.32	1.37
3052	1,593.28	32.28461307	-103.84546401	15.78	16.02	0.03	0.23	0.23
3053	1,593.81	32.28461234	-103.84546725	14.57	14.53	0.01	0.27	-0.04
3054	1,594.33	32.28461197	-103.84547035	14.45	13.48	0.00	0.25	-0.98
3055	1,594.85	32.28461153	-103.84547362	14.26	13.63	0.00	0.22	-0.63
3056	1,595.37	32.28461108	-103.84547692	14.77	13.24	0.00	0.19	-1.52
3057	1,595.89	32.28461056	-103.84547965	13.40	12.97	0.00	0.22	-0.43
3058	1,596.42	32.28461003	-103.84548226	12.34	9.22	0.00	0.15	-3.13
3059	1,596.94	32.28461046	-103.84548574	14.18	12.93	0.00	0.10	-1.25
3060	1,597.46	32.28461099	-103.84548929	13.24	10.16	0.00	0.13	-3.09
3061	1,597.98	32.28461215	-103.84549305	14.06	10.63	-0.01	0.10	-3.44
3062	1,598.51	32.28461334	-103.84549675	13.48	9.57	-0.01	0.15	-3.91
3063	1,599.03	32.28461488	-103.84550002	12.93	9.88	-0.01	0.13	-3.05
3064	1,599.55	32.28461617	-103.84550324	13.56	9.18	-0.01	0.14	-4.38
3065	1,600.08	32.28461630	-103.84550634	13.91	10.82	0.00	0.14	-3.09
3066	1,600.60	32.28461637	-103.84550816	13.40	9.96	0.01	0.17	-3.44
3067	1,601.12	32.28461629	-103.84550655	13.59	11.33	0.01	0.22	-2.27
3068	1,601.64	32.28461599	-103.84550584	13.71	10.00	0.01	0.07	-3.71
3069	1,602.15	32.28461528	-103.84550687	12.89	8.44	0.01	0.02	-4.45
3070	1,602.68	32.28461615	-103.84550874	13.83	9.65	0.02	0.03	-4.18
3071	1,603.21	32.28461913	-103.84551166	14.30	5.82	0.06	-0.02	-8.48
3072	1,603.73	32.28462251	-103.84551356	13.79	4.73	0.07	-0.10	-9.06
3073	1,604.25	32.28462626	-103.84551449	14.34	5.55	0.07	-0.17	-8.79
3074	1,604.77	32.28462939	-103.84551632	13.91	1.64	0.07	-0.25	-12.27
3075	1,605.29	32.28463214	-103.84551878	13.24	3.01	0.04	-0.19	-10.23
3076	1,605.82	32.28463446	-103.84552247	12.58	3.95	0.03	-0.09	-8.63
3077	1,606.34	32.28463659	-103.84552671	12.70	5.66	0.02	-0.07	-7.03
3078	1,606.86	32.28463663	-103.84553092	12.50	4.49	0.02	0.00	-8.01
3079	1,607.38	32.28463605	-103.84553514	13.09	8.24	0.02	0.04	-4.84
3080	1,607.91	32.28463319	-103.84553630	13.20	9.84	0.01	0.10	-3.36

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3081	1,608.43	32.28462995	-103.84553695	13.09	8.09	0.00	0.02	-5.00
3082	1,608.95	32.28462820	-103.84553754	12.23	8.75	-0.01	0.01	-3.48
3083	1,609.47	32.28462657	-103.84553811	13.28	9.49	0.01	0.19	-3.79
3084	1,610.00	32.28462530	-103.84553751	13.87	10.74	0.00	0.03	-3.13
3085	1,610.52	32.28462386	-103.84553743	13.05	7.42	0.04	-0.05	-5.63
3086	1,611.04	32.28462112	-103.84554135	12.73	6.80	0.04	-0.06	-5.94
3087	1,611.56	32.28461855	-103.84554507	14.69	10.39	0.06	-0.02	-4.30
3088	1,612.08	32.28461674	-103.84554783	14.38	10.16	0.07	0.06	-4.22
3089	1,612.61	32.28461505	-103.84555035	13.63	8.40	0.08	0.07	-5.24
3090	1,613.13	32.28461375	-103.84555210	14.02	9.02	0.07	0.09	-5.00
3091	1,613.65	32.28461192	-103.84555361	14.45	7.89	0.06	0.07	-6.56
3092	1,614.17	32.28460922	-103.84555461	14.88	8.16	0.06	0.05	-6.72
3093	1,614.69	32.28460595	-103.84555570	15.04	9.26	0.06	-0.04	-5.78
3094	1,615.22	32.28460198	-103.84555692	15.90	9.92	0.06	0.05	-5.98
3095	1,615.74	32.28459858	-103.84555747	16.56	10.94	0.02	0.08	-5.63
3096	1,616.26	32.28459569	-103.84555744	16.72	11.52	0.02	0.14	-5.20
3097	1,616.79	32.28459292	-103.84555495	17.97	14.10	0.02	0.13	-3.87
3098	1,617.31	32.28459030	-103.84555109	18.44	13.13	0.01	0.14	-5.31
3099	1,617.83	32.28458775	-103.84554595	20.98	15.82	0.01	0.16	-5.16
3100	1,618.35	32.28458523	-103.84554027	25.78	16.02	0.00	0.23	-9.77
3101	1,618.87	32.28458303	-103.84553509	25.55	16.56	-0.01	0.23	-8.98
3102	1,619.40	32.28458092	-103.84553005	25.12	16.99	-0.01	0.20	-8.13
3103	1,619.92	32.28457905	-103.84552431	29.14	19.18	0.00	0.18	-9.96
3104	1,620.44	32.28457721	-103.84551847	28.09	19.45	0.02	0.14	-8.63
3105	1,620.96	32.28457525	-103.84551295	28.91	20.90	0.01	0.17	-8.01
3106	1,621.48	32.28457325	-103.84550740	27.62	20.98	0.01	0.19	-6.64
3107	1,622.01	32.28457058	-103.84550105	28.32	22.07	0.04	0.35	-6.25
3108	1,622.53	32.28456800	-103.84549476	27.81	23.71	0.05	0.43	-4.10
3109	1,623.05	32.28456603	-103.84548889	27.50	21.68	0.11	0.77	-5.82
3110	1,623.57	32.28456415	-103.84548291	30.43	25.31	0.41	2.34	-5.12
3111	1,624.09	32.28456259	-103.84547653	57.77	51.09	2.53	11.23	-6.68
3112	1,624.62	32.28456126	-103.84547031	55.23	-62.70	-2.74	-15.56	-117.93
3113	1,625.14	32.28456045	-103.84546452	66.33	-211.09	3.46	-36.89	-277.42
3114	1,625.66	32.28455952	-103.84545881	44.92	-228.91	9.22	-36.89	-273.83
3115	1,626.19	32.28455838	-103.84545315	36.02	-208.44	9.22	-36.89	-244.45
3116	1,626.71	32.28455722	-103.84544835	187.62	-221.56	0.95	-36.89	-409.18
3117	1,627.23	32.28455604	-103.84544450	193.56	-235.82	1.49	-36.89	-429.38
3118	1,627.75	32.28455475	-103.84544163	124.41	-202.15	4.79	-36.89	-326.56
3119	1,628.27	32.28455338	-103.84543957	76.68	-1.68	4.04	6.15	-78.36
3120	1,628.79	32.28455296	-103.84543927	64.38	108.32	3.58	34.64	43.95
3121	1,629.32	32.28455307	-103.84543997	63.75	87.70	3.60	24.45	23.95
3122	1,629.84	32.28455311	-103.84543991	65.90	16.80	3.59	4.06	-49.10
3123	1,630.36	32.28455311	-103.84543956	58.05	82.54	3.20	23.85	24.49
3124	1,630.88	32.28455385	-103.84543734	54.10	105.08	2.76	27.29	50.98
3125	1,631.41	32.28455475	-103.84543468	42.81	89.92	1.73	20.98	47.11
3126	1,631.92	32.28455539	-103.84543477	34.34	66.88	0.88	14.60	32.54
3127	1,632.44	32.28455600	-103.84543519	30.59	54.88	0.65	11.54	24.30
3128	1,632.97	32.28455599	-103.84543535	31.45	55.00	0.69	11.19	23.56
3129	1,633.50	32.28455587	-103.84543545	31.80	55.98	0.69	11.94	24.18
3130	1,634.02	32.28455483	-103.84543482	32.07	56.13	0.68	12.33	24.06
3131	1,634.54	32.28455395	-103.84543414	34.14	59.92	0.78	12.87	25.78
3132	1,635.06	32.28455407	-103.84543316	35.55	61.41	0.76	12.97	25.86
3133	1,635.58	32.28455402	-103.84543162	32.93	49.61	0.61	9.52	16.68
3134	1,636.10	32.28455348	-103.84542825	30.08	34.96	0.35	4.82	4.88
3135	1,636.63	32.28455306	-103.84542506	30.98	28.01	0.16	2.46	-2.97
3136	1,637.15	32.28455293	-103.84542229	31.99	27.34	0.08	1.48	-4.65
3137	1,637.67	32.28455277	-103.84541941	31.45	26.25	0.06	1.06	-5.20
3138	1,638.20	32.28455258	-103.84541642	30.63	27.89	0.06	0.78	-2.73
3139	1,638.72	32.28455196	-103.84541293	32.58	28.87	0.04	0.61	-3.71
3140	1,639.24	32.28455089	-103.84540891	33.28	31.02	0.02	0.44	-2.27
3141	1,639.76	32.28454888	-103.84540431	31.48	29.45	0.02	0.39	-2.03
3142	1,640.28	32.28454619	-103.84539927	33.36	27.73	0.02	0.38	-5.63
3143	1,640.81	32.28454335	-103.84539557	30.27	24.14	0.01	0.32	-6.13
3144	1,641.33	32.28454043	-103.84539255	28.91	22.23	0.01	0.41	-6.68
3145	1,641.85	32.28453954	-103.84538916	29.61	21.56	0.03	0.40	-8.05
3146	1,642.37	32.28453934	-103.84538561	26.88	20.82	0.04	0.35	-6.06
3147	1,642.89	32.28453686	-103.84538102	26.13	18.87	0.05	0.40	-7.27
3148	1,643.42	32.28453391	-103.84537621	25.23	20.86	0.05	0.51	-4.38
3149	1,643.94	32.28453067	-103.84537210	24.81	24.38	0.03	0.49	-0.43
3150	1,644.46	32.28452740	-103.84536803	24.41	24.92	0.02	0.44	0.51
3151	1,644.98	32.28452373	-103.84536454	23.36	27.03	0.01	0.36	3.67
3152	1,645.51	32.28452007	-103.84536110	23.20	28.79	0.01	0.39	5.59
3153	1,646.03	32.28451636	-103.84535803	22.38	28.56	0.00	0.31	6.17
3154	1,646.55	32.28451265	-103.84535486	21.56	27.07	0.03	0.31	5.51
3155	1,647.07	32.28450897	-103.84535130	21.29	25.74	0.02	0.33	4.45
3156	1,647.60	32.28450508	-103.84534776	21.06	26.56	0.01	0.30	5.51
3157	1,648.12	32.28450064	-103.84534434	20.70	23.44	0.02	0.30	2.74

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3158	1,648.64	32.28449612	-103.84534115	20.74	22.85	0.02	0.27	2.11
3159	1,649.16	32.28449156	-103.84533849	21.95	22.89	0.04	0.27	0.94
3160	1,649.68	32.28448668	-103.84533591	22.31	23.05	0.03	0.25	0.74
3161	1,650.20	32.28448142	-103.84533346	23.24	24.06	0.02	0.29	0.82
3162	1,650.73	32.28447624	-103.84533114	23.09	22.50	0.03	0.29	-0.59
3163	1,651.25	32.28447116	-103.84532892	23.24	24.34	0.03	0.32	1.09
3164	1,651.77	32.28446652	-103.84532632	28.20	24.84	0.03	0.40	-3.36
3165	1,652.30	32.28446212	-103.84532342	29.45	24.41	0.03	0.49	-5.04
3166	1,652.82	32.28445804	-103.84532011	23.75	24.88	0.06	0.58	1.13
3167	1,653.34	32.28445404	-103.84531655	22.66	25.47	0.08	0.67	2.81
3168	1,653.86	32.28444992	-103.84531293	23.32	25.59	0.11	0.77	2.27
3169	1,654.38	32.28444574	-103.84530928	22.93	26.37	0.11	0.88	3.44
3170	1,654.91	32.28444303	-103.84530513	21.88	25.70	0.08	0.91	3.83
3171	1,655.43	32.28444059	-103.84530090	22.31	25.27	0.05	0.79	2.97
3172	1,655.95	32.28444420	-103.84529887	25.27	27.66	0.03	0.52	2.38
3173	1,656.47	32.28444826	-103.84529706	53.05	9.26	0.02	0.40	-43.79
3174	1,657.00	32.28445373	-103.84529759	103.79	21.56	0.03	0.40	-82.23
3175	1,657.52	32.28445908	-103.84529821	116.37	38.98	0.02	0.35	-77.38
3176	1,658.04	32.28446353	-103.84529957	96.29	29.81	0.04	0.36	-66.48
3177	1,658.56	32.28446776	-103.84530071	72.15	21.76	0.03	0.35	-50.39
3178	1,659.08	32.28447111	-103.84530095	44.84	21.68	0.03	0.33	-23.16
3179	1,659.61	32.28447454	-103.84530159	36.95	25.66	0.04	0.31	-11.29
3180	1,660.13	32.28447791	-103.84530313	37.42	29.45	0.04	0.28	-7.97
3181	1,660.65	32.28448188	-103.84530424	36.29	37.62	0.03	0.28	1.33
3182	1,661.17	32.28448688	-103.84530459	35.35	33.63	0.03	0.24	-1.72
3183	1,661.69	32.28449140	-103.84530503	35.74	29.53	0.01	0.27	-6.21
3184	1,662.22	32.28449538	-103.84530561	33.56	26.95	0.02	0.24	-6.60
3185	1,662.74	32.28449861	-103.84530536	31.48	23.95	0.03	0.25	-7.54
3186	1,663.26	32.28450120	-103.84530441	30.55	23.13	0.01	0.21	-7.42
3187	1,663.78	32.28450075	-103.84530204	32.85	24.92	0.01	0.22	-7.93
3188	1,664.30	32.28449842	-103.84529882	36.84	26.88	0.01	0.21	-9.96
3189	1,664.82	32.28449408	-103.84529660	47.07	36.95	0.03	0.25	-10.12
3190	1,665.35	32.28448884	-103.84529482	51.48	45.27	0.03	0.27	-6.21
3191	1,665.87	32.28448355	-103.84529361	75.31	21.13	0.02	0.28	-54.18
3192	1,666.39	32.28447825	-103.84529257	132.73	21.84	0.02	0.28	-110.90
3193	1,666.91	32.28447260	-103.84529143	176.52	62.58	0.01	0.31	-113.95
3194	1,667.44	32.28446689	-103.84529027	215.43	116.72	0.04	0.30	-98.71
3195	1,667.96	32.28446117	-103.84528878	224.96	131.68	0.06	0.33	-93.28
3196	1,668.48	32.28445543	-103.84528727	199.65	107.19	0.05	0.35	-92.46
3197	1,669.01	32.28444960	-103.84528559	126.88	57.19	0.04	0.33	-69.69
3198	1,669.53	32.28444379	-103.84528400	47.73	7.97	0.03	0.32	-39.77
3199	1,670.05	32.28443812	-103.84528305	30.70	15.16	0.04	0.33	-15.55
3200	1,670.57	32.28443256	-103.84528199	21.88	22.42	0.02	0.31	0.55
3201	1,671.09	32.28442743	-103.84528056	16.72	19.77	0.06	0.34	3.05
3202	1,671.62	32.28442271	-103.84527815	16.60	16.29	0.03	0.34	-0.31
3203	1,672.14	32.28441898	-103.84527347	15.51	15.23	0.04	0.32	-0.27
3204	1,672.66	32.28441673	-103.84526844	15.27	15.16	0.02	0.29	-0.12
3205	1,673.18	32.28441686	-103.84526284	15.12	13.83	0.00	0.27	-1.29
3206	1,673.71	32.28441885	-103.84525810	15.00	14.34	0.01	0.26	-0.66
3207	1,674.23	32.28442289	-103.84525427	15.23	13.56	0.02	0.27	-1.68
3208	1,674.75	32.28442780	-103.84525243	17.46	15.04	0.01	0.26	-2.42
3209	1,675.27	32.28443341	-103.84525216	19.18	18.83	0.02	0.27	-0.35
3210	1,675.79	32.28443883	-103.84525248	24.06	26.06	0.02	0.25	1.99
3211	1,676.32	32.28444411	-103.84525312	27.54	12.89	0.03	0.26	-14.65
3212	1,676.84	32.28444957	-103.84525401	113.98	-22.07	0.01	0.26	-136.05
3213	1,677.36	32.28445510	-103.84525499	205.27	20.86	0.02	0.28	-184.41
3214	1,677.88	32.28446054	-103.84525628	274.53	82.77	0.01	0.31	-191.76
3215	1,678.41	32.28446598	-103.84525764	308.36	137.11	0.02	0.34	-171.25
3216	1,678.92	32.28447123	-103.84525936	343.24	147.66	0.02	0.34	-195.59
3217	1,679.44	32.28447647	-103.84526113	323.16	153.52	0.00	0.32	-169.65
3218	1,679.97	32.28448263	-103.84526201	327.77	147.58	0.01	0.31	-180.20
3219	1,680.50	32.28448883	-103.84526283	301.95	155.16	0.02	0.30	-146.80
3220	1,681.02	32.28449519	-103.84526350	257.23	118.40	0.03	0.28	-138.83
3221	1,681.54	32.28450142	-103.84526408	189.49	67.89	0.02	0.26	-121.60
3222	1,682.06	32.28450682	-103.84526413	70.55	5.55	0.06	0.24	-65.00
3223	1,682.58	32.28451198	-103.84526406	40.55	19.34	0.05	0.27	-21.21
3224	1,683.11	32.28451643	-103.84526358	29.38	30.12	0.05	0.31	0.74
3225	1,683.63	32.28452079	-103.84526287	26.52	26.84	0.04	0.27	0.31
3226	1,684.15	32.28452495	-103.84526167	26.88	22.73	0.03	0.27	-4.14
3227	1,684.67	32.28452894	-103.84526010	26.64	24.26	0.04	0.26	-2.38
3228	1,685.19	32.28453269	-103.84525798	26.02	24.10	0.04	0.30	-1.91
3229	1,685.72	32.28453506	-103.84525532	24.81	23.52	0.03	0.26	-1.29
3230	1,686.24	32.28453605	-103.84525210	25.16	23.16	0.03	0.27	-1.99
3231	1,686.77	32.28453461	-103.84524940	25.00	23.24	0.04	0.27	-1.76
3232	1,687.28	32.28453147	-103.84524715	24.49	23.40	0.05	0.28	-1.09
3233	1,687.81	32.28452743	-103.84524541	24.88	22.54	0.04	0.28	-2.34
3234	1,688.33	32.28452291	-103.84524393	23.67	20.63	0.02	0.30	-3.05

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3235	1,688.85	32.28451841	-103.84524317	27.81	28.28	0.02	0.28	0.47
3236	1,689.37	32.28451389	-103.84524265	30.78	26.52	0.01	0.26	-4.26
3237	1,689.89	32.28450865	-103.84524329	87.85	-15.63	0.02	0.26	-103.48
3238	1,690.41	32.28450324	-103.84524417	185.27	10.82	0.01	0.23	-174.45
3239	1,690.95	32.28449791	-103.84524528	250.94	54.22	0.01	0.25	-196.72
3240	1,691.46	32.28449275	-103.84524638	298.83	94.22	0.01	0.27	-204.61
3241	1,691.98	32.28448749	-103.84524714	297.81	123.71	0.01	0.34	-174.10
3242	1,692.51	32.28448219	-103.84524790	307.93	154.41	0.02	0.34	-153.52
3243	1,693.03	32.28447683	-103.84524854	296.48	162.46	0.01	0.33	-134.02
3244	1,693.55	32.28447142	-103.84524919	286.21	148.16	0.02	0.34	-138.05
3245	1,694.07	32.28446577	-103.84524995	268.20	125.55	0.01	0.30	-142.66
3246	1,694.60	32.28446012	-103.84525066	213.36	92.70	0.01	0.30	-120.66
3247	1,695.12	32.28445461	-103.84525120	164.49	49.88	0.02	0.30	-114.61
3248	1,695.64	32.28444919	-103.84525170	66.09	-5.66	0.02	0.28	-71.76
3249	1,696.16	32.28444402	-103.84525208	35.43	4.34	0.05	0.28	-31.09
3250	1,696.68	32.28443898	-103.84525226	24.26	22.97	0.03	0.25	-1.29
3251	1,697.21	32.28443413	-103.84525218	20.00	21.60	0.02	0.29	1.60
3252	1,697.73	32.28442941	-103.84525220	17.19	17.50	0.03	0.28	0.31
3253	1,698.25	32.28442479	-103.84525233	16.64	16.09	0.03	0.29	-0.55
3254	1,698.77	32.28441995	-103.84525118	15.35	14.88	0.04	0.27	-0.47
3255	1,699.29	32.28441495	-103.84524917	14.88	13.91	0.02	0.27	-0.98
3256	1,699.82	32.28441192	-103.84524469	14.45	12.38	0.01	0.22	-2.07
3257	1,700.34	32.28440979	-103.84523905	13.98	13.16	0.01	0.26	-0.82
3258	1,700.86	32.28441055	-103.84523331	13.87	13.28	0.01	0.26	-0.59
3259	1,701.38	32.28441218	-103.84522754	13.52	12.97	0.04	0.27	-0.55
3260	1,701.91	32.28441549	-103.84522367	14.22	12.31	0.03	0.28	-1.91
3261	1,702.43	32.28441910	-103.84522013	14.73	12.73	0.01	0.25	-1.99
3262	1,702.95	32.28442318	-103.84521845	15.12	13.98	0.02	0.27	-1.13
3263	1,703.47	32.28442730	-103.84521690	15.47	14.45	0.02	0.26	-1.02
3264	1,703.99	32.28443098	-103.84521649	15.43	14.69	0.03	0.22	-0.74
3265	1,704.51	32.28443466	-103.84521614	16.68	16.17	0.02	0.27	-0.51
3266	1,705.04	32.28443866	-103.84521624	17.03	17.07	0.02	0.25	0.04
3267	1,705.56	32.28444274	-103.84521625	19.02	17.89	0.03	0.27	-1.13
3268	1,706.08	32.28444716	-103.84521584	20.55	20.70	0.02	0.26	0.16
3269	1,706.60	32.28445160	-103.84521544	28.28	32.11	0.02	0.23	3.83
3270	1,707.13	32.28445615	-103.84521508	36.95	43.83	0.02	0.26	6.88
3271	1,707.65	32.28446000	-103.84521451	41.06	21.09	0.02	0.26	-19.96
3272	1,708.17	32.28446262	-103.84521359	106.25	-13.98	0.01	0.25	-120.23
3273	1,708.69	32.28446421	-103.84521299	150.78	1.99	0.00	0.27	-148.79
3274	1,709.22	32.28446455	-103.84521280	140.35	13.71	0.02	0.29	-126.64
3275	1,709.74	32.28446453	-103.84521276	127.81	18.32	0.05	0.28	-109.49
3276	1,710.26	32.28446422	-103.84521285	145.39	19.45	0.03	0.28	-125.94
3277	1,710.78	32.28446419	-103.84521285	142.97	16.76	0.02	0.30	-126.21
3278	1,711.30	32.28446434	-103.84521279	131.80	15.94	0.04	0.28	-115.86
3279	1,711.83	32.28446464	-103.84521258	143.16	15.16	0.04	0.27	-128.01
3280	1,712.35	32.28446499	-103.84521230	155.23	20.59	0.03	0.29	-134.65
3281	1,712.87	32.28446623	-103.84521298	157.85	21.29	0.03	0.27	-136.56
3282	1,713.39	32.28446771	-103.84521393	180.78	15.51	0.04	0.26	-165.27
3283	1,713.91	32.28447181	-103.84521406	199.38	37.19	0.03	0.22	-162.19
3284	1,714.44	32.28447632	-103.84521407	183.98	46.25	0.02	0.24	-137.73
3285	1,714.96	32.28448173	-103.84521414	163.36	70.98	0.01	0.26	-92.38
3286	1,715.48	32.28448720	-103.84521420	179.84	89.22	0.01	0.27	-90.63
3287	1,716.00	32.28449270	-103.84521400	193.83	83.56	0.01	0.25	-110.27
3288	1,716.53	32.28449828	-103.84521378	178.32	69.34	0.04	0.25	-108.98
3289	1,717.05	32.28450411	-103.84521336	74.41	0.55	0.04	0.24	-73.87
3290	1,717.57	32.28450985	-103.84521291	42.27	11.56	0.05	0.24	-30.70
3291	1,718.09	32.28451534	-103.84521234	29.53	30.20	0.04	0.24	0.66
3292	1,718.62	32.28452069	-103.84521187	24.53	27.23	0.03	0.24	2.70
3293	1,719.14	32.28452567	-103.84521162	23.28	26.41	0.06	0.25	3.13
3294	1,719.66	32.28453030	-103.84521111	22.34	24.38	0.06	0.28	2.03
3295	1,720.18	32.28453447	-103.84521018	24.22	26.45	0.05	0.29	2.23
3296	1,720.70	32.28453804	-103.84520943	27.07	30.90	0.04	0.26	3.83
3297	1,721.23	32.28454093	-103.84520890	25.74	25.74	0.02	0.25	0.00
3298	1,721.75	32.28454343	-103.84520673	41.99	11.33	0.02	0.25	-30.66
3299	1,722.27	32.28454562	-103.84520323	75.66	12.50	0.02	0.27	-63.16
3300	1,722.79	32.28454553	-103.84519946	76.09	21.21	0.03	0.28	-54.88
3301	1,723.32	32.28454418	-103.84519556	64.69	19.22	0.05	0.27	-45.47
3302	1,723.84	32.28454100	-103.84519247	62.23	12.73	0.03	0.22	-49.49
3303	1,724.36	32.28453713	-103.84518970	56.52	13.44	0.00	0.21	-43.09
3304	1,724.88	32.28453181	-103.84518873	54.77	13.79	0.02	0.22	-40.98
3305	1,725.41	32.28452614	-103.84518817	47.73	19.84	0.02	0.24	-27.89
3306	1,725.92	32.28452027	-103.84518874	49.81	21.33	0.03	0.25	-28.48
3307	1,726.44	32.28451436	-103.84518943	59.45	24.38	0.03	0.26	-35.08
3308	1,726.97	32.28450832	-103.84519031	87.70	17.07	0.03	0.26	-70.63
3309	1,727.49	32.28450229	-103.84519119	124.38	20.82	0.03	0.24	-103.56
3310	1,728.02	32.28449655	-103.84519197	128.67	37.66	0.02	0.25	-91.02
3311	1,728.54	32.28449084	-103.84519269	100.27	36.02	0.02	0.22	-64.26

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3312	1,729.06	32.28448534	-103.84519312	90.90	66.06	0.01	0.24	-24.84
3313	1,729.58	32.28447986	-103.84519359	105.70	140.51	0.02	0.24	34.81
3314	1,730.10	32.28447457	-103.84519423	88.01	138.91	0.02	0.27	50.90
3315	1,730.63	32.28446904	-103.84519495	163.40	21.80	0.03	0.25	-141.60
3316	1,731.15	32.28446308	-103.84519585	212.42	45.70	0.02	0.29	-166.72
3317	1,731.67	32.28445723	-103.84519685	169.73	54.06	0.02	0.27	-115.66
3318	1,732.19	32.28445149	-103.84519800	76.72	-1.95	0.03	0.29	-78.67
3319	1,732.72	32.28444589	-103.84519930	30.16	1.09	0.04	0.27	-29.06
3320	1,733.24	32.28444045	-103.84520075	21.99	18.75	0.05	0.23	-3.24
3321	1,733.76	32.28443507	-103.84520197	17.66	18.05	0.05	0.26	0.39
3322	1,734.28	32.28442971	-103.84520305	15.55	14.96	0.03	0.23	-0.59
3323	1,734.80	32.28442429	-103.84520289	14.96	13.83	0.03	0.24	-1.13
3324	1,735.33	32.28441883	-103.84520209	15.16	14.14	0.02	0.23	-1.02
3325	1,735.85	32.28441511	-103.84519799	14.45	13.59	0.02	0.23	-0.86
3326	1,736.37	32.28441195	-103.84519275	14.92	13.44	0.01	0.22	-1.48
3327	1,736.89	32.28441143	-103.84518635	14.84	12.93	0.01	0.22	-1.91
3328	1,737.42	32.28441145	-103.84517968	15.12	12.85	0.02	0.21	-2.27
3329	1,737.94	32.28441340	-103.84517359	14.77	13.32	0.01	0.22	-1.45
3330	1,738.46	32.28441554	-103.84516755	14.77	13.67	0.01	0.23	-1.09
3331	1,738.98	32.28442003	-103.84516475	15.63	13.98	0.01	0.21	-1.64
3332	1,739.51	32.28442460	-103.84516213	15.59	14.61	0.03	0.22	-0.98
3333	1,740.03	32.28442992	-103.84516151	16.52	16.33	0.02	0.24	-0.20
3334	1,740.55	32.28443520	-103.84516090	17.89	17.93	0.02	0.23	0.04
3335	1,741.07	32.28444033	-103.84516040	21.33	22.23	0.02	0.23	0.90
3336	1,741.59	32.28444549	-103.84515986	29.81	31.99	0.01	0.23	2.19
3337	1,742.12	32.28445072	-103.84515920	37.97	41.68	0.03	0.25	3.71
3338	1,742.64	32.28445593	-103.84515851	82.70	-5.90	0.02	0.25	-88.59
3339	1,743.16	32.28446105	-103.84515778	203.48	-2.58	0.02	0.24	-206.06
3340	1,743.68	32.28446609	-103.84515736	276.41	62.50	0.02	0.30	-213.91
3341	1,744.20	32.28447103	-103.84515738	296.84	129.02	0.02	0.30	-167.81
3342	1,744.73	32.28447601	-103.84515748	281.06	138.16	0.02	0.31	-142.89
3343	1,745.25	32.28448105	-103.84515766	250.98	112.46	0.02	0.27	-138.52
3344	1,745.77	32.28448646	-103.84515770	184.22	67.58	0.03	0.28	-116.64
3345	1,746.30	32.28449210	-103.84515765	64.53	-12.11	0.03	0.25	-76.64
3346	1,746.82	32.28449746	-103.84515766	38.24	9.18	0.02	0.24	-29.06
3347	1,747.34	32.28450272	-103.84515769	26.84	29.06	0.02	0.24	2.23
3348	1,747.86	32.28450792	-103.84515787	21.45	25.59	0.01	0.26	4.14
3349	1,748.38	32.28451310	-103.84515809	18.95	22.11	0.02	0.26	3.16
3350	1,748.90	32.28451785	-103.84515823	17.93	20.20	0.03	0.25	2.27
3351	1,749.43	32.28452252	-103.84515836	16.91	18.83	0.03	0.24	1.91
3352	1,749.95	32.28452734	-103.84515820	17.50	19.02	0.03	0.23	1.52
3353	1,750.47	32.28453217	-103.84515797	17.50	18.91	0.02	0.25	1.41
3354	1,750.99	32.28453611	-103.84515558	16.41	17.42	0.04	0.24	1.02
3355	1,751.52	32.28453985	-103.84515303	17.34	18.56	0.04	0.25	1.21
3356	1,752.04	32.28454188	-103.84514923	17.23	18.09	0.03	0.25	0.86
3357	1,752.56	32.28454339	-103.84514526	17.97	19.34	0.02	0.25	1.37
3358	1,753.08	32.28454270	-103.84514062	17.50	20.00	0.01	0.22	2.50
3359	1,753.61	32.28454153	-103.84513622	17.46	18.87	0.03	0.26	1.41
3360	1,754.13	32.28453912	-103.84513249	17.50	18.09	0.03	0.25	0.59
3361	1,754.65	32.28453558	-103.84512952	16.33	16.91	0.04	0.23	0.59
3362	1,755.17	32.28453005	-103.84512789	16.76	17.38	0.02	0.22	0.63
3363	1,755.69	32.28452444	-103.84512703	17.34	17.19	0.01	0.22	-0.16
3364	1,756.22	32.28451867	-103.84512712	19.38	19.88	0.02	0.24	0.51
3365	1,756.74	32.28451295	-103.84512749	18.71	16.48	0.03	0.24	-2.23
3366	1,757.26	32.28450736	-103.84512810	22.31	17.27	0.04	0.25	-5.04
3367	1,757.78	32.28450179	-103.84512866	31.17	33.56	0.03	0.23	2.38
3368	1,758.30	32.28449626	-103.84512919	27.23	4.34	0.04	0.22	-22.89
3369	1,758.83	32.28449100	-103.84512948	177.89	-33.79	0.02	0.26	-211.68
3370	1,759.35	32.28448581	-103.84512968	270.23	65.00	0.01	0.28	-205.23
3371	1,759.87	32.28448009	-103.84513019	339.49	137.23	0.03	0.31	-202.27
3372	1,760.39	32.28447422	-103.84513077	342.62	160.16	0.03	0.35	-182.46
3373	1,760.92	32.28446819	-103.84513195	338.59	164.96	0.04	0.35	-173.63
3374	1,761.44	32.28446212	-103.84513322	275.78	106.02	0.03	0.28	-169.77
3375	1,761.96	32.28445663	-103.84513442	136.68	16.68	0.03	0.26	-120.00
3376	1,762.48	32.28445117	-103.84513559	56.80	12.50	0.03	0.25	-44.30
3377	1,763.00	32.28444581	-103.84513632	33.71	30.51	0.02	0.22	-3.20
3378	1,763.53	32.28444045	-103.84513702	25.90	31.45	0.03	0.25	5.55
3379	1,764.05	32.28443518	-103.84513758	22.31	25.98	0.01	0.22	3.67
3380	1,764.57	32.28442997	-103.84513817	20.90	22.23	0.03	0.23	1.33
3381	1,765.09	32.28442492	-103.84513886	19.88	21.25	0.03	0.25	1.37
3382	1,765.62	32.28441975	-103.84513979	17.50	19.02	0.02	0.23	1.52
3383	1,766.14	32.28441431	-103.84514126	17.11	17.38	0.03	0.23	0.27
3384	1,766.66	32.28440878	-103.84514272	15.98	15.55	0.02	0.24	-0.43
3385	1,767.18	32.28440314	-103.84514414	16.37	14.45	0.02	0.28	-1.91
3386	1,767.70	32.28439772	-103.84514562	15.90	12.58	0.01	0.25	-3.32
3387	1,768.23	32.28439254	-103.84514716	15.82	13.75	0.03	0.23	-2.07
3388	1,768.75	32.28438743	-103.84514723	15.86	14.38	0.02	0.24	-1.48

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3389	1,769.27	32.28438237	-103.84514610	15.51	13.56	0.01	0.23	-1.95
3390	1,769.79	32.28437860	-103.84514288	16.52	14.49	0.01	0.23	-2.03
3391	1,770.32	32.28437555	-103.84513846	16.72	13.91	0.01	0.25	-2.81
3392	1,770.84	32.28437381	-103.84513285	17.15	13.75	0.03	0.24	-3.40
3393	1,771.36	32.28437256	-103.84512677	17.23	14.10	0.01	0.22	-3.13
3394	1,771.88	32.28437240	-103.84512085	16.45	13.95	0.00	0.22	-2.50
3395	1,772.40	32.28437250	-103.84511494	16.21	13.75	0.01	0.23	-2.46
3396	1,772.92	32.28437507	-103.84511026	16.52	14.53	0.01	0.23	-1.99
3397	1,773.44	32.28437795	-103.84510572	15.82	14.73	0.01	0.23	-1.09
3398	1,773.97	32.28438260	-103.84510358	15.90	13.95	0.02	0.21	-1.95
3399	1,774.49	32.28438739	-103.84510161	15.31	13.79	0.02	0.22	-1.52
3400	1,775.02	32.28439321	-103.84510112	16.45	14.34	0.03	0.23	-2.11
3401	1,775.54	32.28439899	-103.84510070	17.23	15.70	0.02	0.21	-1.52
3402	1,776.06	32.28440456	-103.84510071	19.02	19.26	0.04	0.22	0.23
3403	1,776.58	32.28441001	-103.84510070	29.02	23.16	0.03	0.23	-5.86
3404	1,777.10	32.28441502	-103.84510067	45.00	15.08	0.01	0.20	-29.92
3405	1,777.63	32.28442009	-103.84510058	108.59	2.97	0.01	0.22	-105.63
3406	1,778.15	32.28442523	-103.84510039	161.41	34.38	0.01	0.24	-127.03
3407	1,778.67	32.28443033	-103.84510015	209.22	58.59	0.02	0.26	-150.63
3408	1,779.19	32.28443538	-103.84509983	257.50	90.86	0.02	0.27	-166.64
3409	1,779.72	32.28444072	-103.84509935	288.63	123.36	0.03	0.27	-165.27
3410	1,780.24	32.28444620	-103.84509872	322.42	131.80	0.03	0.30	-190.63
3411	1,780.76	32.28445155	-103.84509813	355.86	198.28	0.02	0.33	-157.58
3412	1,781.28	32.28445677	-103.84509758	371.06	205.20	0.03	0.36	-165.86
3413	1,781.80	32.28446207	-103.84509726	372.97	194.18	0.03	0.33	-178.79
3414	1,782.33	32.28446741	-103.84509706	392.42	210.86	0.04	0.37	-181.56
3415	1,782.85	32.28447281	-103.84509716	388.59	220.82	0.04	0.37	-167.77
3416	1,783.37	32.28447826	-103.84509737	325.39	164.81	0.04	0.31	-160.59
3417	1,783.89	32.28448345	-103.84509733	162.03	26.13	0.04	0.26	-135.90
3418	1,784.42	32.28448864	-103.84509724	75.82	-6.84	0.02	0.22	-82.66
3419	1,784.94	32.28449407	-103.84509697	60.23	53.40	0.04	0.24	-6.84
3420	1,785.46	32.28449955	-103.84509668	46.72	54.06	0.04	0.25	7.34
3421	1,785.98	32.28450472	-103.84509596	48.13	27.23	0.04	0.25	-20.90
3422	1,786.50	32.28450984	-103.84509525	43.40	17.50	0.04	0.23	-25.90
3423	1,787.03	32.28451486	-103.84509467	32.93	17.03	0.03	0.23	-15.90
3424	1,787.55	32.28451981	-103.84509407	23.01	18.91	0.05	0.24	-4.10
3425	1,788.07	32.28452443	-103.84509339	19.77	20.23	0.04	0.26	0.47
3426	1,788.59	32.28452893	-103.84509217	17.46	19.61	0.05	0.25	2.15
3427	1,789.11	32.28453305	-103.84508938	17.38	18.63	0.06	0.24	1.25
3428	1,789.64	32.28453648	-103.84508577	17.46	19.18	0.03	0.24	1.72
3429	1,790.16	32.28453855	-103.84508062	17.77	19.22	0.03	0.27	1.45
3430	1,790.68	32.28453991	-103.84507543	18.32	19.57	0.02	0.29	1.25
3431	1,791.20	32.28454031	-103.84507022	17.70	19.57	0.04	0.26	1.88
3432	1,791.73	32.28454062	-103.84506524	18.09	20.47	0.03	0.25	2.38
3433	1,792.25	32.28454083	-103.84506046	18.28	20.94	0.02	0.26	2.66
3434	1,792.77	32.28454014	-103.84505605	18.09	20.74	0.04	0.25	2.66
3435	1,793.29	32.28453885	-103.84505189	19.41	21.95	0.04	0.25	2.54
3436	1,793.81	32.28453508	-103.84504948	22.38	24.73	0.03	0.24	2.34
3437	1,794.34	32.28453014	-103.84504790	21.37	20.20	0.02	0.24	-1.17
3438	1,794.86	32.28452498	-103.84504766	67.85	1.48	0.00	0.25	-66.37
3439	1,795.38	32.28451975	-103.84504782	91.25	9.26	0.01	0.24	-81.99
3440	1,795.90	32.28451452	-103.84504794	51.88	4.02	0.03	0.24	-47.85
3441	1,796.43	32.28450928	-103.84504806	31.68	17.34	0.04	0.25	-14.34
3442	1,796.95	32.28450442	-103.84504845	24.34	26.17	0.04	0.28	1.84
3443	1,797.47	32.28449954	-103.84504888	20.78	23.59	0.03	0.25	2.81
3444	1,797.99	32.28449411	-103.84504962	21.33	23.32	0.03	0.26	1.99
3445	1,798.52	32.28448868	-103.84505038	23.91	26.21	0.02	0.22	2.31
3446	1,799.04	32.28448337	-103.84505124	33.44	36.56	0.03	0.24	3.13
3447	1,799.56	32.28447805	-103.84505220	57.73	-3.56	0.02	0.24	-61.29
3448	1,800.08	32.28447306	-103.84505347	219.30	-41.13	0.03	0.22	-260.43
3449	1,800.60	32.28446801	-103.84505482	344.02	57.50	0.03	0.25	-286.52
3450	1,801.13	32.28446290	-103.84505636	383.20	162.97	0.02	0.33	-220.23
3451	1,801.66	32.28445770	-103.84505777	425.23	200.63	0.03	0.37	-224.61
3452	1,802.17	32.28445260	-103.84505889	448.67	229.53	0.03	0.39	-219.14
3453	1,802.69	32.28444724	-103.84505984	438.48	229.06	0.05	0.40	-209.41
3454	1,803.22	32.28444162	-103.84506058	409.69	210.04	0.03	0.35	-199.65
3455	1,803.74	32.28443583	-103.84506126	285.00	97.42	0.03	0.26	-187.58
3456	1,804.26	32.28442987	-103.84506190	98.56	-31.06	0.03	0.21	-129.61
3457	1,804.78	32.28442421	-103.84506264	47.89	-1.80	0.02	0.22	-49.69
3458	1,805.30	32.28441876	-103.84506343	29.53	28.28	0.02	0.23	-1.25
3459	1,805.83	32.28441335	-103.84506387	22.34	23.24	0.01	0.21	0.90
3460	1,806.35	32.28440796	-103.84506417	18.71	19.02	0.04	0.24	0.31
3461	1,806.87	32.28440308	-103.84506386	18.36	17.38	0.03	0.25	-0.98
3462	1,807.39	32.28439834	-103.84506339	17.19	15.16	0.01	0.23	-2.03
3463	1,807.92	32.28439410	-103.84505992	17.62	15.59	0.00	0.25	-2.03
3464	1,808.44	32.28438994	-103.84505601	17.50	14.38	0.01	0.22	-3.13
3465	1,808.96	32.28438851	-103.84505002	18.24	16.33	0.03	0.23	-1.91

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3466	1,809.48	32.28438728	-103.84504393	18.32	16.37	0.02	0.24	-1.95
3467	1,810.00	32.28438775	-103.84503807	17.15	14.34	0.02	0.22	-2.81
3468	1,810.53	32.28438856	-103.84503233	18.01	14.22	0.02	0.20	-3.79
3469	1,811.05	32.28439165	-103.84502771	17.73	14.65	0.03	0.24	-3.09
3470	1,811.57	32.28439518	-103.84502349	18.01	15.51	0.04	0.26	-2.50
3471	1,812.09	32.28440039	-103.84502074	22.31	16.37	0.04	0.27	-5.94
3472	1,812.61	32.28440575	-103.84501865	26.60	15.16	0.01	0.15	-11.45
3473	1,813.14	32.28441141	-103.84501818	23.95	17.89	0.03	0.11	-6.05
3474	1,813.66	32.28441708	-103.84501769	22.31	21.33	0.03	0.27	-0.98
3475	1,814.18	32.28442271	-103.84501718	22.97	24.18	0.05	0.25	1.21
3476	1,814.70	32.28442836	-103.84501690	26.21	29.41	0.05	0.23	3.20
3477	1,815.23	32.28443402	-103.84501687	31.64	38.44	0.06	0.27	6.80
3478	1,815.75	32.28443971	-103.84501692	42.27	54.14	0.05	0.28	11.88
3479	1,816.27	32.28444542	-103.84501701	67.81	29.96	0.04	0.28	-37.85
3480	1,816.79	32.28445096	-103.84501706	116.95	25.55	0.04	0.28	-91.41
3481	1,817.32	32.28445641	-103.84501709	113.83	34.49	0.02	0.26	-79.34
3482	1,817.84	32.28446205	-103.84501734	64.18	15.08	0.05	0.25	-49.10
3483	1,818.36	32.28446777	-103.84501768	42.03	24.06	0.05	0.32	-17.97
3484	1,818.88	32.28447342	-103.84501830	29.06	33.63	0.05	0.30	4.57
3485	1,819.40	32.28447906	-103.84501899	23.32	28.40	0.04	0.27	5.08
3486	1,819.92	32.28448453	-103.84501958	19.88	22.42	0.03	0.25	2.54
3487	1,820.44	32.28448998	-103.84502016	18.32	19.65	0.04	0.25	1.33
3488	1,820.97	32.28449519	-103.84502077	17.93	17.97	0.03	0.21	0.04
3489	1,821.49	32.28450039	-103.84502137	18.20	18.87	0.06	0.23	0.66
3490	1,822.02	32.28450541	-103.84502175	20.47	18.59	0.04	0.24	-1.88
3491	1,822.54	32.28451039	-103.84502208	25.20	24.69	0.04	0.24	-0.51
3492	1,823.06	32.28451528	-103.84502206	27.77	12.46	0.04	0.25	-15.31
3493	1,823.58	32.28452006	-103.84502183	61.45	-1.13	0.03	0.27	-62.58
3494	1,824.10	32.28452447	-103.84502089	70.74	11.17	0.04	0.25	-59.57
3495	1,824.63	32.28452874	-103.84501970	46.48	6.13	0.12	0.29	-40.35
3496	1,825.15	32.28453264	-103.84501796	32.23	8.36	0.07	0.30	-23.87
3497	1,825.68	32.28453622	-103.84501545	31.60	22.89	0.05	0.27	-8.71
3498	1,826.19	32.28453918	-103.84501196	32.11	30.82	0.03	0.28	-1.29
3499	1,826.72	32.28454111	-103.84500744	35.12	35.04	0.01	0.24	-0.08
3500	1,827.24	32.28454194	-103.84500189	34.96	39.26	0.06	0.38	4.30
3501	1,827.76	32.28454210	-103.84499633	39.02	46.60	0.04	0.24	7.58
3502	1,828.28	32.28454176	-103.84499074	39.88	48.98	0.04	0.29	9.10
3503	1,828.80	32.28453992	-103.84498618	44.34	29.30	0.02	0.23	-15.04
3504	1,829.33	32.28453731	-103.84498215	80.39	-5.74	0.02	0.21	-86.13
3505	1,829.85	32.28453277	-103.84498021	112.15	-4.65	0.02	0.21	-116.80
3506	1,830.37	32.28452756	-103.84497897	57.07	4.41	0.03	0.22	-61.48
3507	1,830.89	32.28452196	-103.84497867	35.16	10.39	0.03	0.27	-24.77
3508	1,831.42	32.28451626	-103.84497856	22.85	22.58	0.04	0.24	-0.27
3509	1,831.94	32.28451075	-103.84497860	18.59	19.96	0.04	0.26	1.37
3510	1,832.46	32.28450523	-103.84497866	16.56	16.48	0.03	0.23	-0.08
3511	1,832.98	32.28449979	-103.84497880	16.29	14.96	0.03	0.23	-1.33
3512	1,833.51	32.28449437	-103.84497894	14.53	14.34	0.09	0.26	-0.20
3513	1,834.03	32.28448925	-103.84497902	14.96	14.65	0.05	0.27	-0.31
3514	1,834.55	32.28448402	-103.84497908	16.25	15.16	0.05	0.28	-1.09
3515	1,835.07	32.28447829	-103.84497900	16.25	15.23	0.04	0.24	-1.02
3516	1,835.59	32.28447265	-103.84497877	18.28	16.88	0.04	0.24	-1.41
3517	1,836.11	32.28446705	-103.84497810	24.73	24.49	0.02	0.25	-0.23
3518	1,836.64	32.28446143	-103.84497740	25.04	-8.71	0.03	0.25	-33.75
3519	1,837.16	32.28445585	-103.84497666	200.39	-48.87	0.01	0.23	-249.26
3520	1,837.68	32.28445014	-103.84497604	310.74	59.14	0.03	0.26	-251.60
3521	1,838.20	32.28444427	-103.84497560	372.58	137.62	0.04	0.31	-234.96
3522	1,838.73	32.28443829	-103.84497525	378.05	174.92	0.03	0.31	-203.13
3523	1,839.25	32.28443221	-103.84497498	420.08	178.20	0.03	0.34	-241.88
3524	1,839.77	32.28442616	-103.84497501	399.22	184.26	0.02	0.35	-214.96
3525	1,840.29	32.28442015	-103.84497524	326.76	136.99	0.03	0.32	-189.77
3526	1,840.81	32.28441442	-103.84497539	124.14	-11.91	0.02	0.23	-136.06
3527	1,841.34	32.28440885	-103.84497550	61.02	-8.75	0.04	0.22	-69.77
3528	1,841.86	32.28440332	-103.84497556	3.56	26.13	0.42	0.34	22.58
3529	1,842.38	32.28439781	-103.84497562	16.84	22.07	0.13	0.38	5.23
3530	1,842.90	32.28439235	-103.84497563	19.49	19.57	0.05	0.27	0.08
3531	1,843.43	32.28438689	-103.84497563	18.36	16.41	0.03	0.22	-1.95
3532	1,843.95	32.28438182	-103.84497429	18.95	16.52	0.03	0.25	-2.42
3533	1,844.47	32.28437680	-103.84497278	19.10	16.33	0.01	0.23	-2.77
3534	1,844.99	32.28437327	-103.84496769	18.20	14.96	0.03	0.22	-3.24
3535	1,845.51	32.28437002	-103.84496251	18.48	15.23	0.03	0.26	-3.24
3536	1,846.04	32.28436928	-103.84495663	17.34	15.51	0.01	0.21	-1.84
3537	1,846.56	32.28436904	-103.84495061	18.28	14.06	0.03	0.25	-4.22
3538	1,847.08	32.28437086	-103.84494424	18.44	14.34	0.01	0.22	-4.10
3539	1,847.60	32.28437341	-103.84493840	18.75	15.66	0.02	0.22	-3.09
3540	1,848.12	32.28437784	-103.84493409	18.95	16.60	0.03	0.25	-2.34
3541	1,848.65	32.28438282	-103.84493080	19.14	17.11	0.02	0.24	-2.03
3542	1,849.17	32.28438877	-103.84492934	19.92	17.89	0.03	0.23	-2.03

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3543	1,849.69	32.28439454	-103.84492834	22.07	22.34	0.02	0.23	0.27
3544	1,850.21	32.28440014	-103.84492791	29.65	32.54	0.04	0.23	2.89
3545	1,850.74	32.28440592	-103.84492759	47.93	49.53	0.03	0.25	1.60
3546	1,851.26	32.28441186	-103.84492739	127.15	-32.50	0.04	0.23	-159.65
3547	1,851.78	32.28441763	-103.84492749	293.16	34.06	0.02	0.26	-259.10
3548	1,852.30	32.28442330	-103.84492780	347.11	121.52	0.02	0.28	-225.59
3549	1,852.83	32.28442875	-103.84492839	350.00	120.74	0.03	0.26	-229.26
3550	1,853.35	32.28443405	-103.84492910	190.82	21.88	0.02	0.22	-168.95
3551	1,853.87	32.28443971	-103.84492973	64.53	-37.50	0.03	0.20	-102.03
3552	1,854.39	32.28444548	-103.84493035	38.79	16.76	0.03	0.24	-22.03
3553	1,854.91	32.28445157	-103.84493054	26.02	26.88	0.06	0.25	0.86
3554	1,855.44	32.28445773	-103.84493067	20.94	19.18	0.03	0.26	-1.76
3555	1,855.96	32.28446362	-103.84493081	17.38	17.23	0.05	0.25	-0.16
3556	1,856.48	32.28446952	-103.84493096	15.78	14.53	0.04	0.24	-1.25
3557	1,857.00	32.28447532	-103.84493121	14.53	12.38	0.03	0.22	-2.15
3558	1,857.53	32.28448108	-103.84493149	14.53	13.83	0.04	0.25	-0.70
3559	1,858.05	32.28448656	-103.84493196	14.73	13.95	0.03	0.24	-0.78
3560	1,858.57	32.28449203	-103.84493242	14.22	12.50	0.04	0.21	-1.72
3561	1,859.09	32.28449731	-103.84493280	14.61	12.58	0.04	0.23	-2.03
3562	1,859.62	32.28450274	-103.84493318	14.45	12.23	0.04	0.25	-2.23
3563	1,860.14	32.28450853	-103.84493356	14.84	13.56	0.04	0.26	-1.29
3564	1,860.66	32.28451417	-103.84493376	16.06	15.74	0.04	0.22	-0.31
3565	1,861.18	32.28451954	-103.84493367	18.67	18.98	0.04	0.25	0.31
3566	1,861.70	32.28452460	-103.84493334	25.94	26.02	0.03	0.25	0.08
3567	1,862.23	32.28452925	-103.84493274	16.91	20.94	0.04	0.26	4.02
3568	1,862.75	32.28453325	-103.84493126	70.31	-13.52	0.03	0.29	-83.83
3569	1,863.27	32.28453675	-103.84492906	124.84	14.22	0.02	0.27	-110.63
3570	1,863.79	32.28453916	-103.84492502	143.16	35.35	0.03	0.30	-107.81
3571	1,864.31	32.28454094	-103.84491994	132.89	41.37	0.03	0.30	-91.52
3572	1,864.84	32.28454153	-103.84491410	129.06	30.08	0.05	0.35	-98.99
3573	1,865.36	32.28454165	-103.84490798	163.44	24.96	0.04	0.35	-138.48
3574	1,865.88	32.28454157	-103.84490242	200.70	34.22	0.05	0.36	-166.48
3575	1,866.40	32.28454144	-103.84489701	222.31	46.76	0.04	0.33	-175.55
3576	1,866.92	32.28453980	-103.84489319	158.98	42.81	0.02	0.30	-116.17
3577	1,867.44	32.28453797	-103.84488956	55.31	-24.22	0.04	0.25	-79.53
3578	1,867.97	32.28453325	-103.84488837	31.48	-24.06	0.03	0.22	-55.55
3579	1,868.49	32.28452843	-103.84488733	24.92	21.72	0.05	0.25	-3.20
3580	1,869.01	32.28452361	-103.84488751	19.65	22.70	0.02	0.22	3.05
3581	1,869.54	32.28451885	-103.84488755	17.03	18.36	0.02	0.23	1.33
3582	1,870.06	32.28451430	-103.84488675	15.39	15.35	0.01	0.23	-0.04
3583	1,870.58	32.28450993	-103.84488591	14.69	13.36	0.01	0.22	-1.33
3584	1,871.10	32.28450618	-103.84488497	14.69	12.70	0.00	0.21	-1.99
3585	1,871.63	32.28450185	-103.84488433	14.73	13.75	0.03	0.22	-0.98
3586	1,872.15	32.28449669	-103.84488437	14.45	12.85	0.05	0.23	-1.60
3587	1,872.67	32.28449108	-103.84488448	14.26	12.19	0.04	0.26	-2.07
3588	1,873.19	32.28448495	-103.84488473	13.71	12.97	0.05	0.25	-0.74
3589	1,873.71	32.28447889	-103.84488466	14.18	12.89	0.04	0.22	-1.29
3590	1,874.24	32.28447286	-103.84488425	14.92	11.84	0.04	0.24	-3.09
3591	1,874.76	32.28446694	-103.84488377	14.41	12.58	0.05	0.23	-1.84
3592	1,875.28	32.28446107	-103.84488322	15.00	12.93	0.04	0.23	-2.07
3593	1,875.80	32.28445512	-103.84488289	15.63	13.28	0.04	0.25	-2.34
3594	1,876.33	32.28444911	-103.84488266	16.56	13.36	0.04	0.24	-3.20
3595	1,876.85	32.28444354	-103.84488228	18.67	17.15	0.03	0.27	-1.52
3596	1,877.37	32.28443809	-103.84488183	26.95	27.15	0.04	0.23	0.20
3597	1,877.89	32.28443302	-103.84488136	24.02	26.99	0.04	0.24	2.97
3598	1,878.41	32.28442803	-103.84488087	102.07	-29.73	0.02	0.22	-131.80
3599	1,878.92	32.28442285	-103.84488031	218.87	8.01	0.02	0.24	-210.86
3600	1,879.43	32.28441764	-103.84487973	286.13	92.19	0.01	0.28	-193.95
3601	1,879.97	32.28441154	-103.84487946	336.02	145.63	0.03	0.28	-190.39
3602	1,880.50	32.28440541	-103.84487923	360.90	166.80	0.02	0.28	-194.10
3603	1,881.03	32.28439964	-103.84487928	371.48	164.10	0.03	0.26	-207.38
3604	1,881.55	32.28439387	-103.84487932	357.11	148.13	0.04	0.29	-208.98
3605	1,882.07	32.28438815	-103.84487927	220.94	55.51	0.02	0.23	-165.43
3606	1,882.59	32.28438241	-103.84487916	75.20	-32.46	0.04	0.26	-107.66
3607	1,883.12	32.28437665	-103.84487889	46.41	27.73	0.03	0.24	-18.67
3608	1,883.64	32.28437092	-103.84487852	34.96	41.13	0.04	0.23	6.17
3609	1,884.16	32.28436519	-103.84487797	30.20	27.03	0.03	0.24	-3.16
3610	1,884.68	32.28435936	-103.84487743	28.05	20.31	0.04	0.22	-7.73
3611	1,885.20	32.28435339	-103.84487688	26.64	23.09	0.04	0.22	-3.56
3612	1,885.73	32.28434728	-103.84487649	22.58	25.23	0.03	0.21	2.66
3613	1,886.25	32.28434099	-103.84487624	21.48	23.52	0.04	0.22	2.03
3614	1,886.77	32.28433490	-103.84487618	19.14	18.71	0.03	0.19	-0.43
3615	1,887.29	32.28432889	-103.84487626	18.40	18.28	0.03	0.21	-0.12
3616	1,887.81	32.28432302	-103.84487676	18.48	17.93	0.02	0.21	-0.55
3617	1,888.34	32.28431721	-103.84487745	16.88	15.74	0.05	0.22	-1.13
3618	1,888.86	32.28431160	-103.84487751	17.66	14.18	0.04	0.22	-3.48
3619	1,889.38	32.28430602	-103.84487737	16.84	15.82	0.04	0.21	-1.02

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3620	1,889.90	32.28430090	-103.84487440	16.84	15.27	0.02	0.21	-1.56
3621	1,890.43	32.28429585	-103.84487092	16.29	12.93	0.02	0.17	-3.36
3622	1,890.95	32.28429332	-103.84486499	18.20	15.82	0.02	0.24	-2.38
3623	1,891.47	32.28429098	-103.84485884	19.02	17.34	0.02	0.23	-1.68
3624	1,891.99	32.28429018	-103.84485215	19.81	19.26	0.04	0.21	-0.55
3625	1,892.51	32.28428955	-103.84484549	14.38	2.38	0.05	0.37	-11.99
3626	1,893.04	32.28429041	-103.84483894	23.20	18.32	0.00	0.15	-4.88
3627	1,893.57	32.28429201	-103.84483290	23.48	27.46	-0.01	0.07	3.98
3628	1,894.08	32.28429636	-103.84482935	27.03	31.13	0.00	0.08	4.10
3629	1,894.60	32.28430104	-103.84482655	43.24	49.92	0.02	0.09	6.68
3630	1,895.13	32.28430639	-103.84482580	51.41	15.78	0.01	0.13	-35.63
3631	1,895.65	32.28431186	-103.84482527	152.93	47.73	0.02	0.20	-200.66
3632	1,896.17	32.28431751	-103.84482510	268.36	55.63	0.02	0.23	-212.73
3633	1,896.69	32.28432330	-103.84482487	285.74	128.01	0.01	0.22	-157.73
3634	1,897.21	32.28432925	-103.84482456	341.84	130.47	0.01	0.27	-211.37
3635	1,897.74	32.28433500	-103.84482414	359.96	155.74	0.01	0.27	-204.22
3636	1,898.26	32.28434059	-103.84482362	363.75	185.63	0.03	0.30	-178.13
3637	1,898.78	32.28434648	-103.84482331	374.73	211.88	0.03	0.30	-162.85
3638	1,899.30	32.28435258	-103.84482312	365.82	179.73	0.05	0.33	-186.09
3639	1,899.83	32.28435853	-103.84482291	381.48	185.94	0.04	0.31	-195.55
3640	1,900.35	32.28436442	-103.84482269	368.63	182.11	0.05	0.35	-186.52
3641	1,900.87	32.28437034	-103.84482261	368.24	177.62	0.05	0.31	-190.63
3642	1,901.39	32.28437628	-103.84482257	360.98	179.34	0.03	0.31	-181.64
3643	1,901.91	32.28438204	-103.84482277	354.41	163.95	0.04	0.34	-190.47
3644	1,902.44	32.28438779	-103.84482301	306.45	141.80	0.01	0.24	-164.65
3645	1,902.96	32.28439394	-103.84482287	276.88	104.14	0.02	0.20	-172.73
3646	1,903.48	32.28440012	-103.84482272	218.32	67.50	0.03	0.24	-150.82
3647	1,904.00	32.28440601	-103.84482244	125.51	22.66	0.05	0.18	-102.85
3648	1,904.53	32.28441187	-103.84482215	45.55	-2.93	0.04	0.23	-48.48
3649	1,905.05	32.28441754	-103.84482176	29.77	21.64	0.05	0.22	-8.13
3650	1,905.57	32.28442321	-103.84482155	21.09	21.21	0.05	0.24	0.12
3651	1,906.09	32.28442885	-103.84482209	17.70	16.99	0.03	0.27	-0.70
3652	1,906.61	32.28443437	-103.84482254	16.06	14.38	0.03	0.20	-1.68
3653	1,907.14	32.28443961	-103.84482278	15.86	13.91	0.01	0.21	-1.95
3654	1,907.66	32.28444500	-103.84482276	14.02	12.58	0.05	0.24	-1.45
3655	1,908.18	32.28445061	-103.84482231	14.69	13.56	0.03	0.15	-1.13
3656	1,908.70	32.28445637	-103.84482183	13.59	11.41	0.03	0.21	-2.19
3657	1,909.23	32.28446233	-103.84482131	14.88	13.28	0.04	0.21	-1.60
3658	1,909.75	32.28446824	-103.84482065	13.05	9.02	0.03	0.19	-4.02
3659	1,910.27	32.28447412	-103.84481988	14.69	12.19	0.03	0.28	-2.50
3660	1,910.79	32.28447983	-103.84481909	15.00	12.89	0.02	0.23	-2.11
3661	1,911.32	32.28448546	-103.84481828	15.78	15.27	0.04	0.26	-0.51
3662	1,911.84	32.28449098	-103.84481805	16.41	14.84	0.03	0.17	-1.56
3663	1,912.36	32.28449647	-103.84481804	15.23	16.45	0.03	0.17	1.21
3664	1,912.88	32.28450161	-103.84481829	38.67	4.65	0.05	0.26	-34.02
3665	1,913.40	32.28450667	-103.84481859	51.02	14.45	0.03	0.24	-36.56
3666	1,913.92	32.28451185	-103.84481884	63.24	19.10	0.03	0.21	-44.14
3667	1,914.44	32.28451706	-103.84481908	85.63	16.52	0.01	0.23	-69.10
3668	1,914.97	32.28452192	-103.84481807	148.75	9.81	0.03	0.23	-138.95
3669	1,915.49	32.28452666	-103.84481687	182.50	46.60	0.04	0.27	-135.90
3670	1,916.01	32.28452984	-103.84481353	200.39	86.45	0.03	0.29	-113.95
3671	1,916.53	32.28453277	-103.84480986	234.49	123.05	0.03	0.28	-111.45
3672	1,917.06	32.28453424	-103.84480431	241.45	125.94	0.02	0.33	-115.51
3673	1,917.58	32.28453547	-103.84479874	261.37	120.23	0.03	0.28	-141.13
3674	1,918.10	32.28453597	-103.84479304	283.83	139.96	0.02	0.30	-143.87
3675	1,918.63	32.28453648	-103.84478754	280.90	142.73	0.05	0.30	-138.16
3676	1,919.15	32.28453704	-103.84478248	285.12	138.20	0.02	0.32	-146.91
3677	1,919.67	32.28453629	-103.84477782	265.70	141.17	0.02	0.35	-124.53
3678	1,920.19	32.28453367	-103.84477383	264.88	129.30	0.02	0.30	-135.59
3679	1,920.72	32.28452987	-103.84477096	245.08	120.78	0.01	0.25	-124.30
3680	1,921.24	32.28452511	-103.84476938	165.12	88.44	0.24	0.42	-76.68
3681	1,921.76	32.28452003	-103.84476851	131.21	83.79	0.22	0.48	-47.42
3682	1,922.28	32.28451468	-103.84476816	123.56	160.98	0.07	0.39	37.42
3683	1,922.80	32.28450942	-103.84476756	129.38	72.54	0.04	0.26	-56.84
3684	1,923.33	32.28450421	-103.84476685	118.87	28.95	0.02	0.23	-89.92
3685	1,923.85	32.28449864	-103.84476622	39.26	-15.98	0.04	0.24	-55.24
3686	1,924.37	32.28449295	-103.84476563	26.91	11.21	0.02	0.16	-15.70
3687	1,924.89	32.28448719	-103.84476548	19.88	20.27	0.04	0.23	0.39
3688	1,925.42	32.28448139	-103.84476541	15.39	15.04	0.04	0.22	-0.35
3689	1,925.92	32.28447604	-103.84476520	16.52	16.99	0.03	0.22	0.47
3690	1,926.43	32.28447070	-103.84476498	15.04	13.05	0.03	0.25	-1.99
3691	1,926.96	32.28446500	-103.84476456	15.78	13.87	0.02	0.21	-1.91
3692	1,927.50	32.28445929	-103.84476413	16.48	13.28	0.05	0.19	-3.20
3693	1,928.02	32.28445368	-103.84476360	15.82	11.56	0.04	0.16	-4.26
3694	1,928.55	32.28444803	-103.84476302	16.02	12.70	0.05	0.22	-3.32
3695	1,929.07	32.28444237	-103.84476222	14.92	11.17	0.04	0.18	-3.75
3696	1,929.59	32.28443658	-103.84476152	15.78	13.83	0.03	0.22	-1.95

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3697	1,930.11	32.28443048	-103.84476115	15.20	11.91	0.03	0.24	-3.28
3698	1,930.64	32.28442444	-103.84476101	14.73	12.23	0.03	0.21	-2.50
3699	1,931.16	32.28441855	-103.84476128	15.66	13.16	0.04	0.18	-2.50
3700	1,931.68	32.28441270	-103.84476177	16.41	12.54	0.03	0.16	-3.87
3701	1,932.20	32.28440693	-103.84476258	17.46	12.19	0.05	0.23	-5.27
3702	1,932.73	32.28440136	-103.84476307	18.24	12.19	0.05	0.18	-6.05
3703	1,933.25	32.28439600	-103.84476325	17.31	13.28	0.03	0.14	-4.02
3704	1,933.77	32.28439043	-103.84476329	18.71	14.96	0.02	0.14	-3.75
3705	1,934.29	32.28438471	-103.84476323	18.24	15.63	0.02	0.19	-2.62
3706	1,934.81	32.28437881	-103.84476362	20.04	13.87	0.03	0.22	-6.17
3707	1,935.34	32.28437283	-103.84476422	20.16	11.76	0.02	0.17	-8.40
3708	1,935.86	32.28436668	-103.84476449	20.86	14.41	0.04	0.18	-6.45
3709	1,936.38	32.28436048	-103.84476466	19.84	18.36	0.03	0.19	-1.49
3710	1,936.90	32.28435436	-103.84476474	19.65	16.45	0.04	0.18	-3.20
3711	1,937.42	32.28434824	-103.84476480	20.98	19.73	0.03	0.20	-1.25
3712	1,937.95	32.28434239	-103.84476484	25.43	27.54	0.04	0.18	2.11
3713	1,938.47	32.28433655	-103.84476488	41.76	44.34	0.04	0.22	2.58
3714	1,938.99	32.28433110	-103.84476454	51.02	10.35	0.02	0.22	-40.66
3715	1,939.51	32.28432563	-103.84476417	183.48	-34.10	0.03	0.15	-217.58
3716	1,940.04	32.28432023	-103.84476357	276.17	31.72	0.03	0.18	-244.45
3717	1,940.56	32.28431477	-103.84476298	364.73	98.87	0.02	0.19	-265.86
3718	1,941.08	32.28430903	-103.84476246	382.97	130.00	0.02	0.22	-252.97
3719	1,941.60	32.28430317	-103.84476202	376.84	161.64	0.02	0.24	-215.20
3720	1,942.12	32.28429706	-103.84476183	363.98	169.88	0.03	0.23	-194.10
3721	1,942.65	32.28429104	-103.84476175	323.20	143.56	0.01	0.17	-179.65
3722	1,943.17	32.28428522	-103.84476186	297.23	132.19	0.04	0.26	-165.04
3723	1,943.69	32.28427940	-103.84476164	287.19	112.42	0.03	0.24	-174.77
3724	1,944.21	32.28427352	-103.84476101	276.41	99.34	0.05	0.24	-177.07
3725	1,944.73	32.28426776	-103.84476004	254.81	75.63	0.02	0.11	-179.18
3726	1,945.26	32.28426210	-103.84475878	128.20	8.13	0.04	0.23	-120.08
3727	1,945.78	32.28425647	-103.84475782	47.23	-28.32	0.03	0.21	-75.55
3728	1,946.30	32.28425084	-103.84475704	31.80	15.08	0.02	0.20	-16.72
3729	1,946.82	32.28424502	-103.84475656	20.82	19.88	0.06	0.13	-0.94
3730	1,947.35	32.28423912	-103.84475621	20.12	18.20	0.03	0.18	-1.91
3731	1,947.87	32.28423320	-103.84475611	18.63	17.70	0.03	0.09	-0.94
3732	1,948.39	32.28422726	-103.84475608	17.19	16.06	0.04	0.18	-1.13
3733	1,948.91	32.28422174	-103.84475605	16.06	12.89	0.03	0.20	-3.16
3734	1,949.44	32.28421623	-103.84475603	16.33	11.99	0.04	0.15	-4.34
3735	1,949.96	32.28421039	-103.84475546	15.74	12.11	0.00	0.07	-3.63
3736	1,950.48	32.28420452	-103.84475484	16.76	13.63	0.03	0.05	-3.13
3737	1,951.00	32.28419902	-103.84475398	16.09	11.41	0.02	0.12	-4.69
3738	1,951.52	32.28419350	-103.84475313	13.87	9.61	0.03	0.17	-4.26
3739	1,952.05	32.28418791	-103.84475236	14.61	11.76	0.04	0.23	-2.85
3740	1,952.57	32.28418231	-103.84475155	15.51	12.34	0.06	0.18	-3.16
3741	1,953.09	32.28417655	-103.84475064	16.02	13.79	0.05	0.20	-2.23
3742	1,953.61	32.28417075	-103.84474977	13.59	10.31	0.02	0.11	-3.28
3743	1,954.14	32.28416485	-103.84474902	16.64	13.32	0.05	0.29	-3.32
3744	1,954.65	32.28415913	-103.84474835	16.64	14.06	0.01	0.08	-2.58
3745	1,955.18	32.28415353	-103.84474779	13.16	7.42	0.02	0.06	-5.74
3746	1,955.70	32.28414796	-103.84474719	16.21	12.70	0.05	0.17	-3.52
3747	1,956.23	32.28414218	-103.84474653	13.20	13.09	0.06	0.15	-0.12
3748	1,956.75	32.28413635	-103.84474578	14.45	11.76	0.06	0.18	-2.70
3749	1,957.27	32.28413045	-103.84474495	15.59	12.73	0.05	0.23	-2.85
3750	1,957.79	32.28412460	-103.84474417	16.45	12.50	0.04	0.22	-3.95
3751	1,958.31	32.28411877	-103.84474341	15.04	10.90	0.04	0.24	-4.14
3752	1,958.84	32.28411271	-103.84474264	15.98	13.83	0.04	0.20	-2.15
3753	1,959.36	32.28410655	-103.84474185	15.39	12.81	0.03	0.20	-2.58
3754	1,959.88	32.28410038	-103.84474117	14.96	10.27	0.07	0.18	-4.69
3755	1,960.40	32.28409417	-103.84474050	16.48	12.70	0.05	0.13	-3.79
3756	1,960.92	32.28408816	-103.84473989	15.16	10.59	0.07	0.08	-4.57
3757	1,961.44	32.28408216	-103.84473929	16.41	13.56	0.05	0.11	-2.85
3758	1,961.97	32.28407624	-103.84473884	17.89	12.89	0.05	0.14	-5.00
3759	1,962.49	32.28407035	-103.84473837	18.44	16.37	0.06	0.21	-2.07
3760	1,963.01	32.28406475	-103.84473770	18.52	14.14	0.05	0.24	-4.38
3761	1,963.54	32.28405921	-103.84473701	19.45	15.86	0.07	0.20	-3.59
3762	1,964.06	32.28405399	-103.84473633	23.13	18.09	0.06	0.26	-5.04
3763	1,964.58	32.28404873	-103.84473577	27.07	16.99	0.07	0.19	-10.08
3764	1,965.10	32.28404333	-103.84473561	32.34	4.14	0.04	0.18	-28.20
3765	1,965.63	32.28403788	-103.84473541	22.89	0.47	0.04	0.16	-22.42
3766	1,966.15	32.28403229	-103.84473513	21.41	16.91	0.03	0.15	-4.49
3767	1,966.67	32.28402673	-103.84473481	16.60	17.27	0.05	0.22	0.66
3768	1,967.19	32.28402119	-103.84473440	19.22	17.15	0.07	0.17	-2.07
3769	1,967.71	32.28401579	-103.84473378	30.08	29.18	0.07	0.30	-0.90
3770	1,968.24	32.28401054	-103.84473293	25.31	15.66	0.05	0.26	-9.65
3771	1,968.76	32.28400528	-103.84473207	37.15	2.42	0.07	0.21	-34.73
3772	1,969.28	32.28399998	-103.84473119	31.29	9.81	0.06	0.22	-21.48
3773	1,969.80	32.28399450	-103.84473025	24.10	20.31	0.05	0.19	-3.79

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3774	1,970.33	32.28398896	-103.84472930	18.91	17.46	0.04	0.22	-1.45
3775	1,970.85	32.28398337	-103.84472742	17.70	14.18	0.08	0.19	-3.52
3776	1,971.37	32.28397775	-103.84472522	18.36	13.75	0.11	0.25	-4.61
3777	1,971.89	32.28397290	-103.84472085	15.94	10.78	0.08	0.22	-5.16
3778	1,972.41	32.28396819	-103.84471599	14.77	5.51	0.08	0.21	-9.26
3779	1,972.92	32.28396653	-103.84470962	16.02	8.24	0.10	0.29	-7.77
3780	1,973.43	32.28396517	-103.84470309	15.74	3.28	0.10	0.11	-12.46
3781	1,973.96	32.28396566	-103.84469620	19.26	6.99	0.08	0.19	-12.27
3782	1,974.50	32.28396630	-103.84468932	18.75	5.23	0.14	0.26	-13.52
3783	1,975.02	32.28396718	-103.84468330	19.06	5.20	0.12	0.28	-13.87
3784	1,975.54	32.28396829	-103.84467719	21.80	10.16	0.08	0.13	-11.64
3785	1,976.07	32.28397060	-103.84467049	23.20	11.88	0.08	0.14	-11.33
3786	1,976.59	32.28397363	-103.84466461	22.58	3.32	0.06	0.04	-19.26
3787	1,977.11	32.28397879	-103.84466116	19.65	4.65	0.07	0.02	-15.00
3788	1,977.63	32.28398405	-103.84465860	24.81	13.91	0.07	0.04	-10.90
3789	1,978.16	32.28398957	-103.84465778	35.94	24.53	0.06	-0.03	-11.41
3790	1,978.68	32.28399509	-103.84465722	30.43	13.91	0.04	-0.10	-16.52
3791	1,979.20	32.28400060	-103.84465700	150.66	-34.41	0.00	-0.09	-185.08
3792	1,979.72	32.28400592	-103.84465718	239.73	21.41	0.03	0.06	-218.32
3793	1,980.25	32.28401107	-103.84465773	242.81	77.66	0.03	0.05	-165.16
3794	1,980.77	32.28401638	-103.84465843	235.98	81.84	0.05	0.02	-154.14
3795	1,981.29	32.28402182	-103.84465923	218.16	71.56	0.02	0.00	-146.60
3796	1,981.81	32.28402770	-103.84465984	207.50	73.87	0.07	0.14	-133.63
3797	1,982.34	32.28403379	-103.84466035	233.36	66.99	0.04	0.00	-166.37
3798	1,982.86	32.28403943	-103.84466081	268.05	101.45	0.08	0.00	-166.60
3799	1,983.38	32.28404494	-103.84466124	300.94	108.28	0.09	0.17	-192.66
3800	1,983.90	32.28405047	-103.84466182	322.97	124.02	0.03	0.13	-198.95
3801	1,984.42	32.28405601	-103.84466243	356.13	131.48	0.04	0.14	-224.65
3802	1,984.94	32.28406141	-103.84466345	379.65	153.59	0.05	0.15	-226.05
3803	1,985.47	32.28406683	-103.84466452	367.31	171.06	0.04	-0.02	-196.25
3804	1,985.99	32.28407226	-103.84466541	351.21	152.89	0.03	0.10	-198.32
3805	1,986.52	32.28407781	-103.84466628	303.56	123.44	0.05	0.05	-180.12
3806	1,987.03	32.28408353	-103.84466680	241.33	75.86	0.03	0.08	-165.47
3807	1,987.56	32.28408931	-103.84466734	117.03	3.40	0.03	0.00	-113.63
3808	1,988.08	32.28409496	-103.84466791	51.76	-12.77	0.03	-0.03	-64.53
3809	1,988.60	32.28410062	-103.84466847	34.88	23.36	0.03	0.06	-11.52
3810	1,989.12	32.28410612	-103.84466896	24.02	19.41	0.04	-0.01	-4.61
3811	1,989.65	32.28411168	-103.84466972	21.76	16.02	0.04	0.06	-5.74
3812	1,990.17	32.28411730	-103.84467094	18.67	12.34	0.02	0.04	-6.33
3813	1,990.69	32.28412286	-103.84467201	16.29	11.68	0.04	-0.03	-4.61
3814	1,991.21	32.28412833	-103.84467291	17.38	11.29	0.05	-0.01	-6.09
3815	1,991.73	32.28413380	-103.84467386	15.35	7.54	0.06	0.06	-7.81
3816	1,992.26	32.28413929	-103.84467488	17.66	10.47	0.04	-0.05	-7.19
3817	1,992.78	32.28414506	-103.84467572	21.09	13.20	0.06	-0.08	-7.89
3818	1,993.30	32.28415103	-103.84467645	25.78	17.54	0.04	-0.07	-8.24
3819	1,993.82	32.28415677	-103.84467697	23.20	12.19	0.05	0.01	-11.02
3820	1,994.35	32.28416241	-103.84467739	79.18	-17.73	0.01	-0.10	-96.91
3821	1,994.87	32.28416798	-103.84467810	158.48	-3.09	0.01	-0.10	-161.56
3822	1,995.39	32.28417354	-103.84467890	207.07	21.91	0.01	-0.02	-185.16
3823	1,995.91	32.28417875	-103.84468007	215.00	33.91	0.02	0.02	-181.09
3824	1,996.43	32.28418393	-103.84468131	245.47	38.91	0.01	-0.18	-206.56
3825	1,996.96	32.28418911	-103.84468266	281.72	69.45	0.01	-0.12	-212.27
3826	1,997.48	32.28419435	-103.84468404	312.07	103.05	0.00	-0.18	-209.02
3827	1,998.00	32.28419988	-103.84468542	341.80	104.61	0.02	-0.11	-237.19
3828	1,998.52	32.28420543	-103.84468674	336.88	135.39	0.02	-0.04	-201.48
3829	1,999.05	32.28421110	-103.84468764	332.27	125.23	0.01	0.01	-207.03
3830	1,999.57	32.28421671	-103.84468851	300.35	122.89	0.02	0.05	-177.46
3831	2,000.09	32.28422209	-103.84468926	282.23	126.33	0.04	0.12	-155.90
3832	2,000.61	32.28422753	-103.84469001	272.07	111.41	0.04	0.06	-160.66
3833	2,001.13	32.28423319	-103.84469076	239.88	86.95	0.02	0.04	-152.93
3834	2,001.66	32.28423888	-103.84469157	187.03	53.28	0.02	0.02	-133.75
3835	2,002.18	32.28424465	-103.84469249	173.83	88.13	0.02	-0.06	-85.70
3836	2,002.70	32.28425046	-103.84469352	163.48	60.94	0.01	0.00	-102.54
3837	2,003.22	32.28425635	-103.84469467	189.38	37.89	-0.06	0.00	-151.48
3838	2,003.75	32.28426216	-103.84469576	198.98	49.26	-0.01	-0.18	-149.73
3839	2,004.27	32.28426790	-103.84469680	138.40	15.90	0.01	-0.10	-122.50
3840	2,004.79	32.28427380	-103.84469780	90.66	10.16	0.04	0.01	-80.51
3841	2,005.31	32.28427982	-103.84469877	56.68	27.81	0.02	0.02	-28.87
3842	2,005.83	32.28428572	-103.84469955	45.70	37.73	0.01	-0.21	-7.97
3843	2,006.36	32.28429163	-103.84470027	40.20	43.59	0.03	0.06	3.40
3844	2,006.88	32.28429749	-103.84470089	31.37	33.40	0.03	0.00	2.03
3845	2,007.40	32.28430336	-103.84470149	23.40	26.21	0.06	0.02	2.81
3846	2,007.92	32.28430886	-103.84470228	19.57	15.43	0.02	0.02	-4.14
3847	2,008.45	32.28431434	-103.84470310	17.70	10.08	0.03	0.04	-7.62
3848	2,008.97	32.28431990	-103.84470442	16.88	8.98	0.01	-0.10	-7.89
3849	2,009.49	32.28432547	-103.84470575	12.07	4.88	0.02	-0.03	-7.19
3850	2,010.01	32.28433091	-103.84470708	15.82	9.53	0.00	-0.16	-6.29

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3851	2,010.54	32.28433642	-103.84470835	16.56	10.82	0.02	-0.02	-5.74
3852	2,011.06	32.28434216	-103.84470916	17.42	9.18	0.01	0.05	-8.24
3853	2,011.58	32.28434797	-103.84470996	15.78	7.77	0.01	0.04	-8.01
3854	2,012.10	32.28435395	-103.84471071	14.61	7.38	0.01	-0.01	-7.23
3855	2,012.62	32.28435984	-103.84471145	17.46	12.03	0.01	0.03	-5.43
3856	2,013.14	32.28436542	-103.84471216	19.61	12.31	0.01	-0.02	-7.30
3857	2,013.67	32.28437104	-103.84471305	18.05	9.45	0.01	-0.06	-8.59
3858	2,014.19	32.28437668	-103.84471420	20.59	11.72	0.01	-0.06	-8.87
3859	2,014.71	32.28438216	-103.84471528	22.54	15.20	0.00	-0.04	-7.34
3860	2,015.23	32.28438745	-103.84471630	20.94	16.17	0.01	-0.02	-4.77
3861	2,015.76	32.28439304	-103.84471727	30.08	26.99	0.02	-0.05	-3.09
3862	2,016.28	32.28439876	-103.84471819	39.96	32.07	-0.07	-0.23	-7.89
3863	2,016.80	32.28440465	-103.84471879	-62.93	-6.33	2.20	-1.75	56.60
3864	2,017.32	32.28441064	-103.84471922	37.50	-31.76	0.25	-4.32	-69.26
3865	2,017.84	32.28441656	-103.84471968	39.65	6.25	0.07	-1.05	-33.40
3866	2,018.37	32.28442245	-103.84472014	46.76	12.54	0.05	-0.04	-34.22
3867	2,018.89	32.28442802	-103.84472029	41.02	28.20	0.01	0.00	-12.81
3868	2,019.41	32.28443353	-103.84472037	43.44	34.73	0.00	0.00	-8.71
3869	2,019.92	32.28443900	-103.84472085	52.89	21.45	0.00	0.03	-31.45
3870	2,020.43	32.28444448	-103.84472137	72.38	13.13	0.07	0.05	-59.26
3871	2,020.96	32.28445008	-103.84472159	51.91	14.73	0.03	0.11	-37.19
3872	2,021.50	32.28445571	-103.84472180	53.09	37.38	0.03	0.13	-15.70
3873	2,022.02	32.28446158	-103.84472216	75.82	12.11	0.02	0.12	-63.71
3874	2,022.55	32.28446747	-103.84472257	173.71	2.38	-0.01	0.09	-171.33
3875	2,023.07	32.28447337	-103.84472313	247.34	47.81	0.00	0.07	-199.53
3876	2,023.59	32.28447915	-103.84472355	262.46	79.57	-0.01	0.10	-182.89
3877	2,024.11	32.28448461	-103.84472354	266.33	94.77	0.02	0.20	-171.56
3878	2,024.64	32.28448988	-103.84472347	278.16	87.70	0.02	0.21	-190.47
3879	2,025.16	32.28449515	-103.84472328	274.53	117.34	0.01	0.15	-157.19
3880	2,025.68	32.28450012	-103.84472349	280.98	124.30	0.01	0.18	-156.68
3881	2,026.20	32.28450481	-103.84472427	252.42	110.94	0.00	0.13	-141.48
3882	2,026.72	32.28450976	-103.84472498	234.96	98.63	0.04	0.20	-136.33
3883	2,027.25	32.28451504	-103.84472564	165.66	52.27	0.03	0.21	-113.40
3884	2,027.77	32.28452029	-103.84472580	87.89	11.21	0.04	0.19	-76.68
3885	2,028.29	32.28452556	-103.84472562	77.89	48.40	0.02	0.15	-29.49
3886	2,028.81	32.28452991	-103.84472444	66.17	77.54	0.01	0.12	11.37
3887	2,029.33	32.28453381	-103.84472278	74.22	51.60	0.02	0.10	-22.62
3888	2,029.86	32.28453687	-103.84471907	99.96	40.70	0.01	0.09	-59.26
3889	2,030.38	32.28453969	-103.84471470	104.77	47.85	-0.01	-0.03	-56.91
3890	2,030.90	32.28454169	-103.84471009	63.95	30.98	-0.02	-0.10	-32.97
3891	2,031.42	32.28454353	-103.84470544	40.47	24.18	-0.01	-0.02	-16.29
3892	2,031.95	32.28454299	-103.84469992	34.49	22.85	0.01	0.08	-11.64
3893	2,032.47	32.28454223	-103.84469437	36.76	26.99	0.00	0.17	-9.77
3894	2,032.99	32.28453833	-103.84469142	31.60	25.43	0.01	0.15	-6.17
3895	2,033.52	32.28453418	-103.84468866	26.13	27.50	0.03	0.05	1.37
3896	2,034.03	32.28452890	-103.84468793	23.28	28.59	0.01	0.05	5.31
3897	2,034.56	32.28452342	-103.84468719	20.04	21.60	0.01	0.11	1.56
3898	2,035.08	32.28451758	-103.84468647	18.59	19.10	0.01	0.14	0.51
3899	2,035.60	32.28451167	-103.84468580	18.13	17.58	0.03	0.18	-0.55
3900	2,036.12	32.28450570	-103.84468529	17.31	14.57	0.02	0.15	-2.74
3901	2,036.65	32.28449961	-103.84468482	21.52	19.96	0.04	0.17	-1.56
3902	2,037.17	32.28449333	-103.84468441	28.13	21.37	0.01	0.15	-6.76
3903	2,037.69	32.28448696	-103.84468403	29.57	29.06	-0.02	-0.07	-0.51
3904	2,038.21	32.28448045	-103.84468371	30.08	30.31	0.00	0.05	0.23
3905	2,038.73	32.28447419	-103.84468323	31.52	32.23	0.04	0.05	0.70
3906	2,039.26	32.28446809	-103.84468263	31.64	30.31	0.02	0.01	-1.33
3907	2,039.78	32.28446201	-103.84468183	27.23	25.55	0.00	-0.10	-1.68
3908	2,040.30	32.28445595	-103.84468092	23.63	14.81	-0.02	-0.33	-8.83
3909	2,040.82	32.28445000	-103.84467975	19.53	8.87	-0.02	-0.42	-10.66
3910	2,041.35	32.28444409	-103.84467848	18.71	5.66	-0.01	-0.39	-13.05
3911	2,041.87	32.28443823	-103.84467764	17.77	3.20	-0.01	-0.57	-14.57
3912	2,042.39	32.28443240	-103.84467693	13.40	-3.67	-0.03	-0.62	-17.07
3913	2,042.91	32.28442658	-103.84467638	20.74	4.53	-0.01	-0.48	-16.21
3914	2,043.43	32.28442077	-103.84467586	20.66	-2.77	-0.03	-0.49	-23.44
3915	2,043.96	32.28441479	-103.84467529	24.26	5.55	-0.01	-0.58	-18.71
3916	2,044.48	32.28440883	-103.84467473	30.78	10.82	0.04	-0.73	-19.96
3917	2,045.00	32.28440316	-103.84467471	33.44	12.70	-0.02	-0.78	-20.74
3918	2,045.52	32.28439749	-103.84467470	58.83	-7.19	-0.04	-0.85	-66.02
3919	2,046.04	32.28439170	-103.84467487	119.18	-18.05	-0.01	-0.62	-137.23
3920	2,046.57	32.28438596	-103.84467480	157.66	1.64	0.02	-0.57	-156.02
3921	2,047.09	32.28438043	-103.84467376	139.88	12.34	0.00	-0.42	-127.54
3922	2,047.61	32.28437491	-103.84467275	135.39	25.51	0.01	-0.51	-109.88
3923	2,048.13	32.28436941	-103.84467180	168.71	13.05	-0.02	-0.64	-155.66
3924	2,048.66	32.28436379	-103.84467101	239.41	22.46	0.01	-0.52	-216.95
3925	2,049.18	32.28435800	-103.84467050	261.99	33.79	-0.01	-0.59	-228.20
3926	2,049.70	32.28435217	-103.84467001	197.85	11.06	-0.04	-0.70	-186.80
3927	2,050.22	32.28434626	-103.84466953	84.96	-36.72	-0.02	-0.80	-121.68

**Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico**

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
3928	2,050.74	32.28434047	-103.84466896	55.55	-12.42	-0.03	-0.61	-67.97
3929	2,051.27	32.28433477	-103.84466831	42.23	5.74	0.00	-0.61	-36.49
3930	2,051.79	32.28432900	-103.84466772	36.56	15.59	-0.02	-0.63	-20.98
3931	2,052.31	32.28432319	-103.84466717	31.13	12.19	-0.03	-0.80	-18.95
3932	2,052.83	32.28431777	-103.84466683	29.34	13.83	0.01	-0.58	-15.51
3933	2,053.36	32.28431249	-103.84466656	26.91	9.77	0.00	-0.50	-17.15
3934	2,053.88	32.28430796	-103.84466586	21.95	1.64	0.00	-0.40	-20.31
3935	2,054.40	32.28430358	-103.84466504	21.60	5.86	-0.01	-0.38	-15.74
3936	2,054.92	32.28430130	-103.84466469	20.23	3.63	0.00	-0.48	-16.60
3937	2,055.44	32.28429927	-103.84466439	19.61	2.81	-0.02	-0.48	-16.80
3938	2,055.97	32.28429786	-103.84466442	19.34	2.93	-0.04	-0.53	-16.41
3939	2,056.49	32.28429632	-103.84466436	19.26	0.35	-0.01	-0.55	-18.91
3940	2,057.01	32.28429244	-103.84466281	19.96	5.08	-0.01	-0.47	-14.88
3941	2,057.53	32.28428833	-103.84466127	18.48	-0.63	0.02	-0.51	-19.10
3942	2,058.06	32.28428287	-103.84465985	16.60	0.51	-0.01	-0.52	-16.09
3943	2,058.58	32.28427728	-103.84465851	14.26	-6.52	0.04	-0.49	-20.78
3944	2,059.10	32.28427130	-103.84465742	13.09	-7.70	0.01	-0.56	-20.78
3945	2,059.62	32.28426519	-103.84465652	14.06	-9.30	-0.01	-0.48	-23.36
3946	2,060.14	32.28425886	-103.84465604	21.29	-3.67	-0.01	-0.57	-24.96
3947	2,060.67	32.28425269	-103.84465548	15.23	-5.94	-0.01	-0.60	-21.17
3948	2,061.19	32.28424681	-103.84465480	30.00	8.40	-0.02	-0.71	-21.60
3949	2,061.71	32.28424093	-103.84465407	40.47	3.79	-0.06	-0.86	-36.68
3950	2,062.23	32.28423502	-103.84465328	137.07	-29.57	-0.02	-0.64	-166.64
3951	2,062.75	32.28422906	-103.84465227	211.21	28.05	0.00	-0.51	-183.16
3952	2,063.28	32.28422300	-103.84465108	232.70	65.12	0.01	-0.48	-167.58
3953	2,063.80	32.28421723	-103.84465005	256.72	69.57	0.04	-0.47	-187.15
3954	2,064.32	32.28421155	-103.84464910	259.77	82.58	0.00	-0.63	-177.19
3955	2,064.85	32.28420620	-103.84464774	262.19	75.23	0.00	-0.67	-186.95
3956	2,065.37	32.28420095	-103.84464624	239.84	77.62	0.00	-0.64	-162.23
3957	2,065.89	32.28419557	-103.84464475	246.13	88.87	-0.04	-0.80	-157.27
3958	2,066.41	32.28419014	-103.84464327	233.59	87.62	-0.04	-1.00	-145.98
3959	2,066.92	32.28418456	-103.84464222	240.74	69.61	-0.02	-0.78	-171.13
3960	2,067.43	32.28417899	-103.84464121	235.66	57.97	0.03	-0.73	-177.70
3961	2,067.96	32.28417300	-103.84464000	224.84	53.20	-0.01	-0.85	-171.64
3962	2,068.50	32.28416700	-103.84463875	221.41	51.45	0.03	-0.81	-169.96
3963	2,069.02	32.28416148	-103.84463733	212.81	55.55	0.00	-0.82	-157.27
3964	2,069.54	32.28415596	-103.84463597	219.41	36.06	-0.02	-0.95	-183.36
3965	2,070.07	32.28415053	-103.84463486	240.00	44.84	-0.01	-0.82	-195.16
3966	2,070.59	32.28414492	-103.84463388	246.72	56.80	-0.01	-0.89	-189.92
3967	2,071.11	32.28413877	-103.84463330	247.58	55.39	0.06	-0.71	-192.19
3968	2,071.63	32.28413261	-103.84463273	248.52	69.38	0.04	-0.53	-179.14
3969	2,072.16	32.28412644	-103.84463219	248.91	72.70	0.08	-0.42	-176.21
3970	2,072.68	32.28412042	-103.84463190	231.29	58.91	0.04	-0.33	-172.38
3971	2,073.20	32.28411461	-103.84463196	234.65	51.21	0.08	-0.19	-183.44
3972	2,073.72	32.28410871	-103.84463219	225.66	51.60	0.03	-0.44	-174.06
3973	2,074.25	32.28410269	-103.84463259	219.92	61.52	0.06	-0.50	-158.40
3974	2,074.77	32.28409690	-103.84463255	222.31	65.20	0.10	-0.28	-157.11
3975	2,075.29	32.28409126	-103.84463221	215.35	53.44	0.08	-0.10	-161.91
3976	2,075.81	32.28408572	-103.84463187	198.48	47.38	0.03	-0.26	-151.09
3977	2,076.33	32.28408021	-103.84463152	167.19	43.09	0.02	-0.34	-124.10
3978	2,076.86	32.28407457	-103.84463105	122.46	40.20	0.10	-0.17	-82.27
3979	2,077.38	32.28406888	-103.84463054	150.35	19.34	0.07	-0.25	-131.02
3980	2,077.90	32.28406283	-103.84462999	222.15	27.66	0.01	-0.22	-194.49
3981	2,078.42	32.28405670	-103.84462942	257.11	56.68	0.01	-0.18	-200.43
3982	2,078.94	32.28405073	-103.84462945	264.88	82.85	0.05	-0.12	-182.03
3983	2,079.47	32.28404472	-103.84462952	280.04	101.37	0.13	0.02	-178.67
3984	2,079.99	32.28403882	-103.84462977	271.88	100.47	0.08	-0.14	-171.41
3985	2,080.51	32.28403294	-103.84462993	292.89	109.77	0.05	-0.16	-183.13
3986	2,081.03	32.28402755	-103.84462916	286.76	116.06	0.02	-0.23	-170.70
3987	2,081.56	32.28402213	-103.84462846	311.60	116.41	0.05	-0.36	-195.20
3988	2,082.08	32.28401690	-103.84462804	327.19	123.40	0.03	-0.30	-203.79
3989	2,082.60	32.28401156	-103.84462767	328.95	118.75	0.03	-0.41	-210.20
3990	2,083.12	32.28400610	-103.84462747	319.49	109.53	0.06	-0.17	-209.96
3991	2,083.65	32.28400089	-103.84462637	246.52	87.73	-0.01	-0.29	-158.79
3992	2,084.17	32.28399616	-103.84462365	200.47	48.05	0.01	-0.15	-152.42
3993	2,084.70	32.28399231	-103.84462004	179.92	46.80	0.09	-0.11	-133.13
3994	2,085.21	32.28398972	-103.84461552	180.20	39.88	0.10	-0.24	-140.31
3995	2,085.73	32.28398820	-103.84461107	221.95	28.56	0.08	-0.08	-193.40
3996	2,086.25	32.28398768	-103.84460677	233.56	43.09	0.10	-0.10	-190.47
3997	2,086.78	32.28398837	-103.84460253	245.04	70.00	0.06	-0.32	-175.04
3998	2,087.30	32.28398985	-103.84459835	239.57	73.59	0.06	-0.30	-165.98
3999	2,087.83	32.28399338	-103.84459488	223.24	84.77	0.05	-0.36	-138.48
4000	2,088.35	32.28399773	-103.84459179	225.86	109.81	0.07	-0.59	-116.05
4001	2,088.87	32.28400294	-103.84459077	232.81	142.50	0.11	0.13	-90.31
4002	2,089.39	32.28400838	-103.84459034	236.60	169.92	0.11	0.55	-66.68
4003	2,089.92	32.28401372	-103.84459074	203.48	157.66	0.19	0.67	-45.82
4004	2,090.43	32.28401886	-103.84459125	155.98	111.48	0.10	0.70	-44.49

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
4005	2,090.96	32.28402461	-103.84459167	108.20	82.97	0.10	0.55	-25.23
4006	2,091.48	32.28403041	-103.84459209	64.73	53.59	0.12	0.04	-11.13
4007	2,092.00	32.28403659	-103.84459253	46.95	44.49	0.35	0.07	-2.46
4008	2,092.52	32.28404257	-103.84459297	55.86	45.20	0.11	0.20	-10.66
4009	2,093.05	32.28404713	-103.84459337	50.78	37.93	0.09	0.19	-12.85
4010	2,093.58	32.28405189	-103.84459388	47.93	38.20	0.06	0.36	-9.73
4011	2,094.09	32.28405696	-103.84459476	48.63	41.64	0.13	0.47	-6.99
4012	2,094.61	32.28406210	-103.84459569	41.72	29.26	0.09	0.19	-12.46
4013	2,095.13	32.28406713	-103.84459673	42.11	23.44	0.05	-0.11	-18.67
4014	2,095.66	32.28407212	-103.84459803	39.38	19.30	0.13	-0.12	-20.08
4015	2,096.18	32.28407697	-103.84459974	45.86	22.42	0.06	-0.11	-23.44
4016	2,096.70	32.28408159	-103.84460120	37.58	15.23	0.03	-0.25	-22.34
4017	2,097.22	32.28408590	-103.84460239	41.06	15.16	0.07	-0.23	-25.90
4018	2,097.74	32.28409099	-103.84460321	40.78	5.55	0.11	-0.72	-35.23
4019	2,098.27	32.28409672	-103.84460374	54.81	22.66	0.10	-0.47	-32.15
4020	2,098.79	32.28410205	-103.84460376	67.23	37.38	0.15	-0.01	-29.84
4021	2,099.31	32.28410715	-103.84460349	93.24	53.44	0.22	0.81	-39.80
4022	2,099.83	32.28411225	-103.84460326	124.84	76.84	0.35	2.14	-48.01
4023	2,100.36	32.28411740	-103.84460304	150.59	101.72	0.49	3.27	-48.87
4024	2,100.88	32.28412219	-103.84460356	165.20	101.88	0.62	4.02	-63.32
4025	2,101.40	32.28412690	-103.84460428	187.62	119.81	0.81	4.72	-67.81
4026	2,101.92	32.28413190	-103.84460531	200.63	149.02	0.88	5.25	-51.60
4027	2,102.44	32.28413695	-103.84460638	174.92	134.14	0.42	2.39	-40.78
4028	2,102.97	32.28414235	-103.84460759	88.71	95.04	0.11	0.45	6.33
4029	2,103.49	32.28414771	-103.84460879	68.09	16.25	-0.05	-0.96	-51.84
4030	2,104.01	32.28415249	-103.84460969	50.74	-12.50	-0.03	-1.05	-63.24
4031	2,104.53	32.28415725	-103.84461065	56.64	-14.57	-0.03	-1.08	-71.21
4032	2,105.06	32.28416186	-103.84461203	45.94	-18.83	-0.03	-1.01	-64.77
4033	2,105.58	32.28416638	-103.84461344	48.24	-16.48	-0.08	-1.21	-64.73
4034	2,106.10	32.28417063	-103.84461501	37.38	-26.60	-0.07	-1.17	-63.99
4035	2,106.62	32.28417520	-103.84461657	25.66	-33.40	-0.07	-1.30	-59.06
4036	2,107.15	32.28418053	-103.84461811	35.55	-24.22	-0.05	-1.31	-59.77
4037	2,107.68	32.28418593	-103.84461951	44.45	-9.10	0.04	-0.87	-53.56
4038	2,108.19	32.28419118	-103.84462068	75.86	50.31	0.12	-0.23	-25.55
4039	2,108.71	32.28419649	-103.84462170	84.02	83.56	0.13	0.37	-0.47
4040	2,109.23	32.28420178	-103.84462256	93.98	102.97	0.10	0.56	8.99
4041	2,109.76	32.28420715	-103.84462316	108.09	98.52	0.07	0.37	-9.57
4042	2,110.28	32.28421259	-103.84462359	130.31	86.33	0.06	0.29	-43.99
4043	2,110.80	32.28421822	-103.84462388	165.47	80.12	0.10	0.46	-85.35
4044	2,111.32	32.28422400	-103.84462412	168.91	87.66	0.10	0.41	-81.25
4045	2,111.84	32.28422999	-103.84462441	166.88	91.76	0.05	0.19	-75.12
4046	2,112.37	32.28423611	-103.84462471	163.01	101.84	0.05	0.42	-61.17
4047	2,112.89	32.28424226	-103.84462537	147.03	65.86	0.03	-0.09	-81.17
4048	2,113.41	32.28424846	-103.84462611	132.70	42.31	0.04	-0.27	-90.39
4049	2,113.92	32.28425430	-103.84462686	99.77	19.92	-0.04	-0.65	-79.84
4050	2,114.43	32.28426013	-103.84462762	96.21	8.63	-0.04	-0.68	-87.58
4051	2,114.96	32.28426624	-103.84462828	108.28	11.99	0.00	-0.67	-96.29
4052	2,115.50	32.28427235	-103.84462894	121.37	16.60	-0.02	-0.65	-104.77
4053	2,116.02	32.28427803	-103.84462965	124.18	25.94	0.03	-0.35	-98.24
4054	2,116.55	32.28428368	-103.84463038	124.96	43.63	0.14	-0.67	-81.33
4055	2,117.07	32.28428914	-103.84463120	136.13	95.90	0.07	-0.12	-40.24
4056	2,117.59	32.28429465	-103.84463192	146.09	81.06	0.10	-0.10	-65.04
4057	2,118.11	32.28430028	-103.84463234	141.80	70.23	0.05	-0.31	-71.56
4058	2,118.63	32.28430617	-103.84463277	131.99	68.83	-0.02	-0.46	-63.16
4059	2,119.16	32.28431254	-103.84463322	131.64	88.75	0.04	-0.20	-42.89
4060	2,119.68	32.28431870	-103.84463373	128.20	107.11	0.03	-0.16	-21.09
4061	2,120.20	32.28432457	-103.84463432	163.98	122.62	0.04	-0.30	-41.37
4062	2,120.72	32.28433027	-103.84463490	195.08	161.91	0.02	-0.17	-33.16
4063	2,121.25	32.28433588	-103.84463546	226.80	173.79	0.01	-0.21	-53.01
4064	2,121.77	32.28434119	-103.84463627	238.32	152.66	0.02	-0.02	-85.66
4065	2,122.29	32.28434632	-103.84463727	241.48	124.69	0.02	-0.31	-116.80
4066	2,122.81	32.28435132	-103.84463826	206.33	89.61	0.03	-0.42	-116.72
4067	2,123.33	32.28435629	-103.84463926	151.29	44.34	0.04	-0.63	-106.95
4068	2,123.85	32.28436179	-103.84464001	111.17	17.07	0.01	-0.76	-94.10
4069	2,124.38	32.28436748	-103.84464067	81.45	16.95	-0.06	-0.90	-64.49
4070	2,124.90	32.28437347	-103.84464121	69.81	17.19	-0.07	-1.04	-52.62
4071	2,125.42	32.28437953	-103.84464171	50.43	7.38	-0.06	-1.03	-43.05
4072	2,125.94	32.28438561	-103.84464182	37.97	-9.92	-0.11	-1.40	-47.89
4073	2,126.47	32.28439170	-103.84464188	19.26	-21.13	-0.14	-1.37	-40.39
4074	2,126.99	32.28439785	-103.84464149	14.18	-18.20	0.14	-1.21	-32.38
4075	2,127.51	32.28440401	-103.84464114	14.84	-22.31	0.00	-1.38	-37.15
4076	2,128.03	32.28441014	-103.84464120	28.87	-6.99	0.00	-1.11	-35.86
4077	2,128.56	32.28441628	-103.84464130	25.27	-9.14	0.00	-0.77	-34.41
4078	2,129.08	32.28442209	-103.84464162	29.06	12.73	-0.03	-0.35	-16.33
4079	2,129.60	32.28442799	-103.84464199	25.23	9.30	-0.04	-0.69	-15.94
4080	2,130.12	32.28443390	-103.84464252	23.24	10.63	-0.06	-0.65	-12.62
4081	2,130.64	32.28443987	-103.84464300	13.79	-7.97	-0.08	-0.87	-21.76

Summary of Results of EM38 Survey
Forty Niner Ridge and Sandy Leases, Cimarex Energy Co., Eddy County, New Mexico

Reading	Time (sec)	Latitude	Longitude	CV-0.5m	CV-1.0m	IV-0.5m	IV-1.0m	Delta CV-1m-0.5m
4082	2,131.17	32.28444597	-103.84464338	9.88	-9.53	-0.03	-0.71	-19.41
4083	2,131.69	32.28445214	-103.84464357	-3.13	-18.24	-0.08	-0.88	-15.12
4084	2,132.21	32.28445836	-103.84464354	-11.91	-32.07	-0.10	-1.09	-20.16
4085	2,132.73	32.28446449	-103.84464345	2.62	-31.17	-0.11	-1.44	-33.79
4086	2,133.26	32.28447064	-103.84464330	-0.94	-35.00	-0.04	-1.05	-34.06
4087	2,133.78	32.28447666	-103.84464379	3.95	-26.56	-0.03	-0.87	-30.51
4088	2,134.30	32.28448266	-103.84464468	6.52	-17.38	-0.03	-0.78	-23.91
4089	2,134.82	32.28448854	-103.84464558	15.43	-0.70	0.01	-0.53	-16.13
4090	2,135.34	32.28449435	-103.84464648	13.87	-1.52	0.01	-0.36	-15.39
4091	2,135.87	32.28449975	-103.84464706	12.77	1.99	0.00	-0.23	-10.78
4092	2,136.39	32.28450505	-103.84464756	12.11	4.38	-0.01	-0.20	-7.73
4093	2,136.91	32.28451049	-103.84464828	14.18	9.88	0.02	0.03	-4.30
4094	2,137.43	32.28451594	-103.84464904	16.02	10.16	-0.01	-0.04	-5.86
4095	2,137.95	32.28452151	-103.84464984	18.32	12.85	0.01	-0.08	-5.47
4096	2,138.48	32.28452707	-103.84465066	25.66	22.23	0.00	-0.06	-3.44
4097	2,139.00	32.28453185	-103.84465182	22.93	18.16	0.00	-0.02	-4.77
4098	2,139.52	32.28453634	-103.84465327	18.63	0.94	0.04	0.23	-17.70
4099	2,140.04	32.28453860	-103.84465687	22.66	14.10	0.01	0.09	-8.55
4100	2,140.57	32.28454031	-103.84466018	16.41	6.48	0.04	0.22	-9.92
4101	2,141.09	32.28453994	-103.84466223	15.12	-0.39	0.12	0.41	-15.51
4102	2,141.61	32.28453957	-103.84466380	16.29	-2.15	0.16	0.45	-18.44
4103	2,142.13	32.28453923	-103.84466413	16.99	-4.38	0.19	0.46	-21.37
4104	2,142.65	32.28453909	-103.84466424	18.32	-2.77	0.19	0.43	-21.09
4105	2,143.18	32.28453930	-103.84466398	17.97	-4.77	0.20	0.48	-22.74
4106	2,143.70	32.28453953	-103.84466335	18.98	-2.42	0.22	0.47	-21.41
4107	2,144.22	32.28453979	-103.84466228	16.09	-4.84	0.18	0.48	-20.94
4108	2,144.74	32.28454010	-103.84466112	14.57	-4.57	0.15	0.40	-19.14
4109	2,145.27	32.28454046	-103.84465986	14.77	-3.91	0.13	0.36	-18.67
4110	2,145.79	32.28454065	-103.84465939	14.61	-3.59	0.13	0.30	-18.20
4111	2,146.31	32.28454074	-103.84465937	12.03	-6.45	0.15	0.34	-18.48
4112	2,146.83	32.28454103	-103.84465944	11.80	-7.81	0.14	0.30	-19.61
4113	2,147.35	32.28454140	-103.84465954	14.06	-3.95	0.15	0.31	-18.01
4114	2,147.88	32.28454156	-103.84465933	11.68	-8.28	0.16	0.38	-19.96
4115	2,148.40	32.28454168	-103.84465905	13.95	-5.23	0.14	0.38	-19.18
4116	2,148.92	32.28454153	-103.84465900	14.02	-3.91	0.15	0.40	-17.93
4117	2,149.44	32.28454135	-103.84465898	11.88	-8.24	0.14	0.33	-20.12
		min		-117.73	-271.17	-7.97	-36.89	-429.38
		max		461.91	238.67	9.22	36.89	76.88
		mean		66.73	30.52	0.04	0.19	-36.21

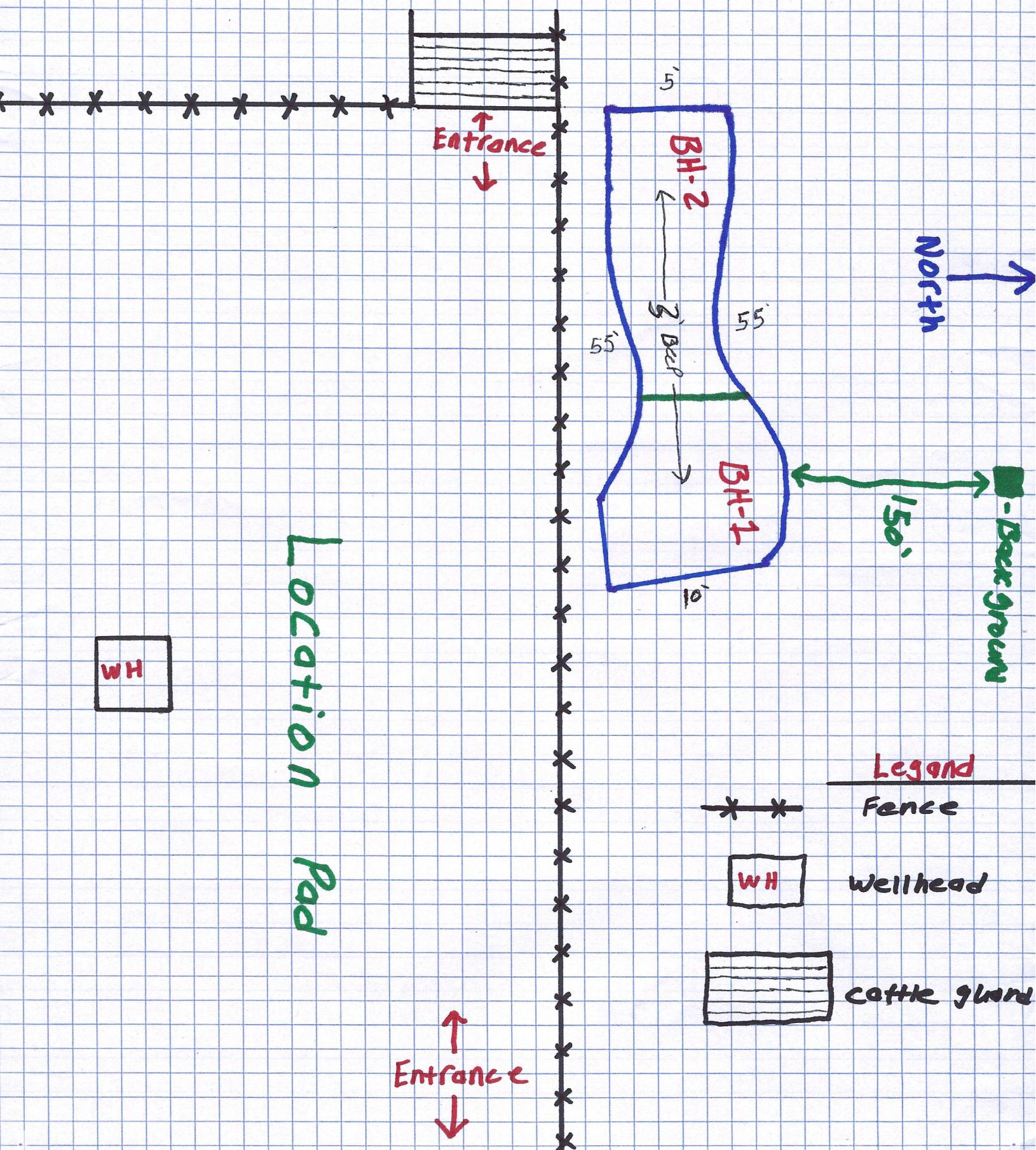
FORTY NINER & SANDY FORTY NINER & SANDY**LEGEND**

- Spill sample locations
- 2.5' – 3' proposed excavation area
- Above ground poly line
- Flex pipe

CIMAREX
Forty ~~Niner~~ & Sandy Battery
(32.28411, -103.84491)

PROPOSED EXCAVATION AREA
& DEPTH MAP
EDDY COUNTY, NEW MEXICO

Cimarex - July 29, 2020 — Forty Niner & Sandy Battery



Photos



CIMAREX ENERGY
SANDY – FORTY NINER BATTERY
EDDY, NM





CIMAREX ENERGY
SANDY – FORTY NINER BATTERY
EDDY, NM



Attachment A



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload**USGS 321726103513701 23S.30E.22.24413**

Eddy County, New Mexico

Latitude 32°17'26", Longitude 103°51'37" NAD27

Land-surface elevation 3,231 feet above NAVD88

The depth of the well is 244 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

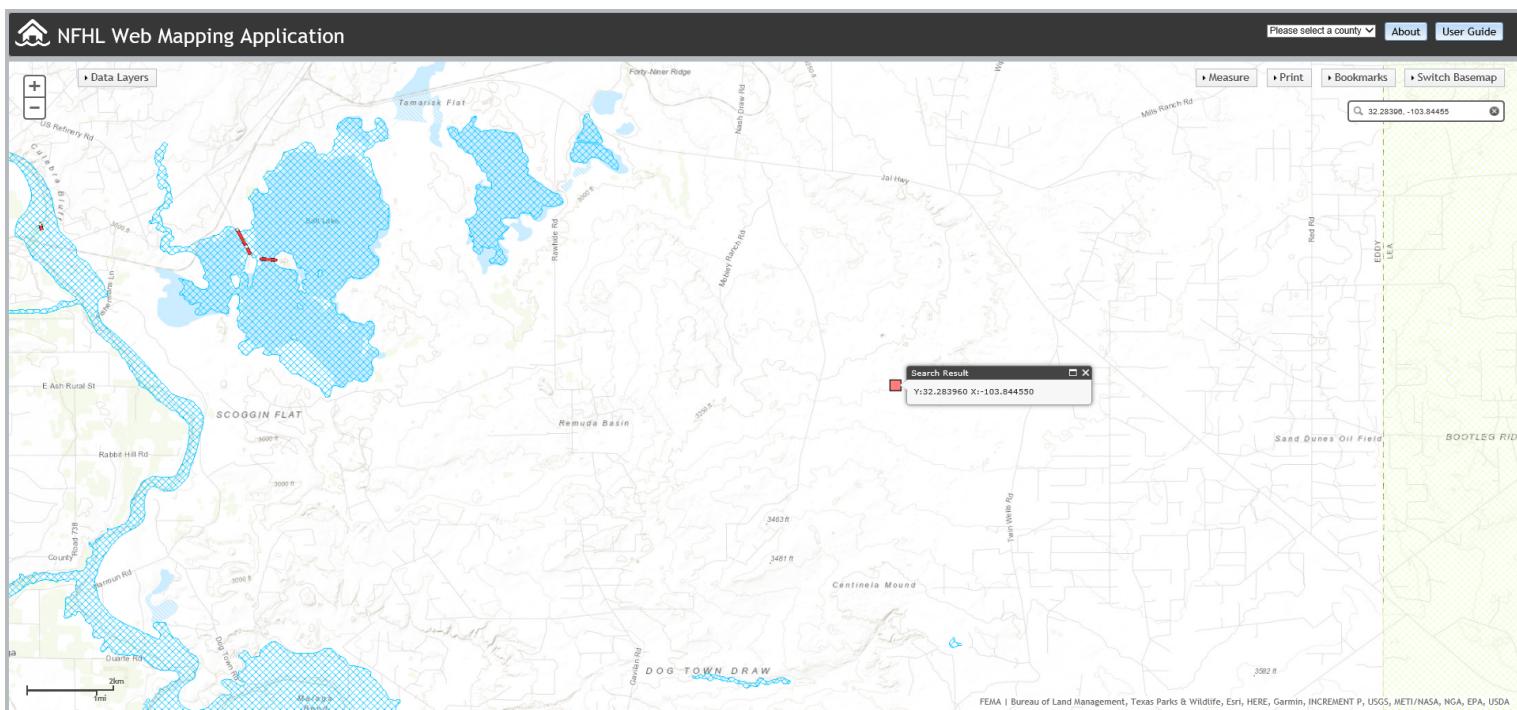
Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1972-09-20		D	227.32			2			U	
1976-12-14		D	226.43			2			U	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)[Feedback on this web site](#)[Automated retrievals](#)[Help](#)



Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141

Revised August 24, 2018

Submit to appropriate OCD District office

Incident ID	nRM2014958679
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cimarex Energy Co.	OGRID: 215099
Contact Name: Laci Luig	Contact Telephone: (432) 571-7800
Contact email: lluig@cimarex.com	Incident # (assigned by OCD) nRM2014958679
Contact mailing address: 600 N Marienfeld Street, Ste. 600 Midland, TX 79701	

Location of Release Source

Latitude 32.28396 _____ Longitude -103.84455 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Sandy Federal Battery	Site Type: Battery Pad
Date Release Discovered: 5/26/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
P	23	23S	30E	Eddy

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 180 bbls	Volume Recovered (bbls) 15 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Mechanical Failure

We found a leak on the water load line due to material failure. This load line is located outside of the containment and has now been moved inside the containment for both the Sandy and Forty Niner. The leaking line has been replaced. We released 180 barrels of produced water onto location and we recovered 15 barrels. We will delineate impacted soil and determine pathway forward for remediation.

Incident ID	nRM2014958679
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? The amount of the release is over 25 barrels.
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
 By Gloria Garza
 To Mike Bratcher, Robert Hamlet, Victoria Venegas and BLM CFO Spill
 By email

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- The source of the release has been stopped.
- The impacted area has been secured to protect human health and the environment.
- Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Laci Luig _____ Title: Engineer Tech. _____

Signature: Laci Luig _____ Date: 5/27/2020 _____

email: lluig@cimarex.com _____ Telephone: (432) 571-7810 _____

OCD Only

Received by: _____ Date: _____

Incident ID	nRM2014958679
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>226'</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Incident ID	nRM2014958679
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Gloria Garza _____ Title: ESH Specialist _____

Signature:  _____ Date: 7/29/2020 _____

email: ggarza@cimarex.com _____ Telephone: (432) 234-3204 _____

OCD Only

Received by: _____ Date: _____

Incident ID	nRM2014958679
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Gloria Garza _____ Title: ESH Specialist _____

Signature: gloria garza _____ Date: 7/29/2020 _____

email: ggarza@cimarex.com _____ Telephone: (432) 234-3204 _____

OCD Only

Received by: _____ Date: _____

Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____