February 16, 2018

Ms. Olivia Yu
Environmental Specialist
New Mexico Oil Conservation Division
Hobbs District 1 Office
1625 French Drive
Hobbs, New Mexico 88240

SUBMITTED VIA EMAIL
Olivia.Yu@state.nm.us

APPROVED
By Olivia Yu at 8:50 am, Mar 26, 2018

NMOCD approves of the delineation completed for 1RP-4632.

Re: Release Characterization Report
Chalupa #4 SWD Wellhead Release Site
Lea County, New Mexico
NMOCD Case No. 1R-4632

Dear Ms. Yu:

Enviro Clean Cardinal LLC (ECC) is pleased to submit to the New Mexico Oil Conservation Division (NMOCD), on behalf of our client Foundation Energy Management, LLC (FEM), the following ***Release Characterization Report***. This report describes the activities that have been performed by FEM to assess the environmental impacts that resulted from a produced water release at their Chalupa #4 SWD Wellhead Release site (Site). The Site is located approximately 18 miles northwest of the City of Lovington in Lea County, New Mexico. The Site property is owned by New Mexico State Trust Lands and administered by the New Mexico State Land Office (NMSLO). Records show the NMSLO has leased the surface of the Site to Norman and Elwanda Hahn Ranches, LTD for agricultural purposes. The location of the Site and its topographic features are shown on the attached **Figure 1**. The Site is in the west-half of the southwest quarter of Section 13, Township 14 South, Range 33 East, and the geodetic coordinates of the Site are 33.103422ºN latitude and -103.576112ºW longitude. The following report describes the results of FEM's release characterization.

Description of Release

On February 23, 2017, a clamp securing a hose to the Chalupa #4 SWD wellhead failed due to corrosion and the hose became loose releasing approximately 125 bbls of saltwater to the ground surface. Approximately 25 bbls were recovered leaving approximately 100 bbls not recovered. The released fluids flowed in a nearly circular pattern around the wellhead accumulating primarily just north and east of the wellhead.

FEM submitted a *Release Notification and Corrective Action* Form C-141 to the NMOCD on March 6, 2017. The NMOCD assigned incident database and remediation case number 1R-4632 to the Site and established a maximum permissible chloride level in soil of 600 mg/kg in their response documentation. A copy of FEM's C-141 Form and the NMOCD's response documentation are provided in the attached **Appendix A**.

7060 South Yale Avenue, Suite 603 ▪ Tulsa, Oklahoma ▪ 74136 ▪ 918.794.7828
www.ECCGRP.com

Initial Assessment

The NMOCD directed FEM to conduct both horizontal and vertical delineation of the chloride impacts and to demonstrate that at least 10 feet of separation exists between the base of chloride impact and top of groundwater saturation. The New Mexico Office of the State Engineer's (OSE's) online water well database indicates the depth-to-groundwater levels of wells within 2,000-meter radius of the site range between 80 and 120 feet, and average 108 feet below ground surface. The ChevronTexaco Lea County Depth to Groundwater Map (W. Johnson, 2005) indicates that the depth to groundwater is approximately 90 to 100 feet below ground surface.

FEM retained Basin Environmental Service Technologies, LLC (Basin) to conduct an initial release characterization at the Site. Basin's field work was performed on May 16, 2017. During this investigation, Basin collected surface soil samples at locations SP #1 through SP #8 as shown on Basin's figure which is re-presented in this report as **Figure 2**. Subsurface soil samples were reportedly not collected because a resistant layer was present. These soil samples were submitted to Cardinal Laboratories in Midland, Texas for chloride analyses (Method SM4500-CI B). Basin delineated the lateral limits of impact by mapping the visually apparent surface soil staining. The results of Basin's characterization work were presented graphically and are re-presented in this report on **Figure 2**. The most heavily affected soils appeared to be located approximately 30 feet north of the wellhead and extend approximately 260 feet west-to-east. The affected surface area appeared to be approximately 0.5 acres. As can be seen from these results, all soil samples collected contained chloride levels that exceed the NMOCD's cleanup level of for this Site of 600 mg/kg. The horizontal and vertical limits of impact were not fully defined through these initial assessment activities.

Release Characterization Work Plan

To complete both the horizontal and vertical delineation of the chloride impacts at this Site, FEM retained ECC to prepare a ***Release Characterization Work Plan***. This document was completed and submitted to the NMOCD on August 18, 2017. NMOCD approved this plan on September 20, 2017. The following assessment activities were to be performed:

- Conduct an EM38 ground conductivity survey at the Site to explore the upper 5 feet of the soil profile and identify the lateral limits of brine impacts to surface soils.
- Based upon the results of the EM38 survey, install at least 4 borings to augment the soil data already generated for the site by Basin. These borings were to be drilled to depths of approximately 6 feet below ground surface and soil samples were to be collected from the following depth intervals: 0 to 0.5 feet, 0.5 to 1 foot, 1 to 2 feet, 2 to 3 feet, 3 to 4 feet, 4 to 5 feet, and 5 to 6 feet below ground surface. These soil samples were to be submitted to the laboratory for chloride analyses by Method 300.
- Vertical delineation was to be accomplished by installing a single deep boring at the Site to the base of chloride impacts in soil or to groundwater saturation whichever occurred first. FEM increased this to two deep borings based upon comments made by the NMOCD during their conditional approval of FEM's Release Characterization Work Plan. Both borings were to be located to assess the areas of highest EM ground conductivity. The borings were to be drilled and sampled on 5-foot depth intervals until a 10-foot interval of soil/rock (i.e., three 5-foot soil samples taken consecutively) were identified through field chloride analyses. When field analyses confirmed the base of chloride impacts, drilling and sampling were to be terminated and the borehole plugged. The soil samples collected from the borings were to be submitted to the laboratory for confirmation chloride analyses by Method 300.

Implementation of Release Characterization Work Plan

On October 31 and November 1, 2017, ECC performed the field work described within the Release Characterization Work Plan. The two primary elements of this plan were to conduct a ground conductivity survey followed by the installation of soil borings and the collection of soil samples. These elements are described in greater detail below.

Ground Conductivity Surveys

On October 31, 2017, ECC conducted two ground conductivity surveys across the Site using an EM38-MK2 meter manufactured by Geonics Limited, Ontario, Canada. This meter has two sets of fixed coils; one separated by 0.5 meters, and a second set separated by 1 meter. The meter also has two dipole orientations; a horizontal and a vertical dipole. The distance between the coils and dipole orientation control the depths that the meter propagates its signal within the subsurface as well as the distribution of the conductivity responses as a function of depth. The greatest depths of investigation are achieved when the meter is run in the vertical dipole, or VD, orientation. Therefore, ECC conducted the EM38 ground conductivity surveys of the entire effected areas around the Site with the meter in the EM38/0.5mVD and EM38/1mVD modes. With the meter in these configurations the maximum depths of investigation were approximately 2.5 feet and 5 feet, respectively.

The EM38 meter outputs both the EM38/0.5mVD and EM38/1mVD ground conductivities separately and continuously. The units of measurement for a ground conductivity meter are millimhos per meter (mmhos/m). To allow these streams of conductivity data to be captured the EM38 was connected to a field computer that was configured to record both conductivity data streams at a frequency of 2 readings per second. The field computer also was connected to a Hemisphere GPS that outputs latitude and longitude coordinates continuously. These wired interconnections of the EM38 meter, field computer and GPS allowed ECC's operator to walk continuously across the Site and capture location and conductivity readings at 5,360 locations. The paths the operator took across the Site (traverses) for the EM38/0.5mVD and EM38/1mVD surveys are shown on **Figures 3** and **4**, respectively. These walking traverses appear as continuous dotted and curved lines that typically run perpendicular to the axes of the impacted areas.

The ground conductivity responses are shown graphically for the EM38/0.5mVD and EM38/1mVD surveys on **Figures 3** and **4**, respectively. The actual EM38 field measurements are presented in tabular format in **Appendix B**. Background EM conductivity readings at the Site were quite variable, but appeared to be less than 50 mmhos/m for both meter configurations. Therefore, on these figures the areas shown shaded in light green are areas that are likely unimpacted from the release. Conversely, the areas shown in dark green and the other colors of blue, orange and red are areas progressively higher in ground conductivity, and likely represent areas more heavily impacted by the brine release. The peak EM38/0.5mVD and EM38/1mVD conductivity readings recorded at the Site were 359.7 mmhos/m and 330.3 mmhos/m, respectively.

As can been seen on **Figures 3** and **4**, from the point of release the brine appears to have flowed primarily towards the north and then towards the east-northeast. Two collection areas are apparent. The first is centered approximately 30 feet north-northeast of the wellhead and extends approximately 160 feet west-to-east and 50 feet north-to-south. The second area is centered approximately 185 feet northeast of the wellhead and extends approximately 60 feet west-to-east and 90 feet north-to-south. A third area of lesser impact appears to extend from the wellhead towards the southeast, a distance of approximately 180 feet.

The northwestern portion of the EM survey area was truncated at the southern and eastern edges of the former reserve pit that was used for the drilling of the Chalupa #4 SWD well. Based upon historical aerial photographs the southeast corner of the reserve pit was located approximately 60 feet north of the wellhead. The reserve pit appears to have been approximately 175 feet west-to-east and 140 feet north-to-south.

Within the area surveyed, there appears to be one pipeline as shown on **Figures 3** and **4**. This pipeline is an FEM aboveground pipeline that connects to the SWD wellhead from which the release occurred. This pipeline is north-south trending, comes from the north, and terminates at the wellhead of the surveyed area.

Soil Sampling

To assess the depths to which the brine impacts infiltrated vertically at the Site, ECC installed two deep soil borings, identified as BH-3 and BH-4, as shown on **Figures 3** and **4**. BH-3 was located approximately 180 east-northeast of the wellhead in the center of the highest recorded EM ground conductivities. BH-4 was located approximately 65 feet northeast of the wellhead again in the center of some of the highest EM ground conductivities recorded. Both borings were drilled using air rotary methods. BH-3 had a total depth of 55 feet BGL and BH-4 had a total depth of 75 feet BGL. Both borings encountered silt or clayey silt at the surface to approximately 3 feet. Below this surficial layer was a resistant caliche interval that extended to 9 to 15 feet below surface. Beneath the caliche layer was sandy silt to total depths. The boring records for BH-3 and BH-4 are provided in **Appendix C**.

Soil samples were collected from both deep borings from the following depth intervals: 0-1 feet, 1-2 feet, 2-3 feet, 3-4 feet, 4-5 feet, 5-6 feet, 9-10 feet, 14-15 feet, 19-20 feet, 24-25 feet, 29-30 feet, 34-35 feet, 39-40 feet, 44-45 feet, 49-50 feet, and 54-55 feet. From the deeper boring BH-4, soil sampling continued from the following depth intervals: 59-60 feet, 64-65 feet, 69-70 feet, and 74-75 feet. These soil samples were initially field screened to estimate the chloride concentrations in each. Field screening consisted of using a Mettler Toledo Seven2Go portable conductivity/salinity meter to first measure the salinity of a 1:1 mixture (by weight) of soil and deionized water. During ECC's assessment 50 grams of soil were mixed with 50 grams of water. After thorough mixing, the salinity was read directly in parts per thousand (ppt). The salinity was then converted to parts per million (ppm) by multiplying by 1,000. The salinity in ppm was then multiplied by 2.26 because ECC has observed for soils in this area that salinity measurements in soils obtained from a 1:1 soil mixture must be multiplied by 2.26 to arrive at an estimate of total salinity, or total soluble salts, obtained from a soil paste extract. ECC has found these derived values to be good estimates of the total soluble salts in a soil. Then, assuming that the dominant salts within a soil/water solution for soils taken at a brine release site will be sodium and chloride, ECC multiplied the total salinity values by 0.607 which is the molar weight ratio of chloride to sodium (Cl = 35.453 and Na = 22.9898 grams). The results of these field measured chloride concentrations are provided on **Table 1**. The field measured chloride measurements indicated that the base of the chloride impacts in BH-3 and BH-4 above 600 mg/kg occurred at depths above 39 feet and 59 feet, respectively. Therefore, ECC terminated the borings at 55 and 75 feet to provide adequate sample to demonstrate adequate separation between the base of impact and top of groundwater. The borings were properly plugged following sample collection.

ECC also installed six (6) borings, identified as HA-9 through HA-14, to assess the chloride levels within the near surface soils at various levels of EM response to calibrate the EM survey results. The locations of these borings are shown on **Figures 3** and **4**. These borings were intended to be installed using hand augers, but resistant caliche caused the borings to be drilled using air rotary drilling methods. Borings HA-12 through HA-14 were drilled near the point of release and

BH-4, and borings HA-9 through HA-11 were drilled near the distal end of the flowpath near boring BH-3. Soil samples were taken from these borings at the following depth intervals: 0-1 feet, 1-2 feet, 2-3 feet, 3-4 feet, 4-5 feet and 5-6 feet. The borings were properly plugged following sample collection. The boring records for HA-9 through HA-14 are provided in **Appendix C**.

Each of the soil samples taken from the above-described borings were placed into containers provided by the laboratory, labeled as to source and depth interval, placed on ice, and transported to the laboratory (Xenco Laboratory, Midland, Texas) under chain-of-custody control. The soil samples were hand delivered to the lab. The soil samples were all analyzed for chloride analyses by Method 300. The results of these laboratory analyses are summarized on **Tables 1** and **2**. The complete laboratory report and chain-of-custody are provided in **Appendix D**.

The laboratory results for the soil samples collected at this Site indicate that the base of the chloride impacts greater than 600 mg/kg occurs above 39 feet in boring BH-3, and above 59 feet in boring BH-4. Assuming that groundwater occurs at approximately 90 below ground surface, these results indicate that approximately 31 to 51 feet of vertical separation exists between the base of the chloride impacts and the top of groundwater saturation.

The results of the shallow soil borings help to confirm that the lateral limits of the soils containing chloride greater than 600 mg/kg are approximately equivalent to the EM responses greater than 50 mmhos/m. The areas of ground conductivities greater than 50 mmhos/m at this Site total approximately 40,322 square feet, or 0.93 acres.

If you have any questions regarding this proposal or our estimated costs, please do not hesitate to contact Ms. Alyssa Beard at Foundation Energy Management in Denver at 303-244-8114, or myself at 918-794-7828. Thanks.

Sincerely,
Enviro Clean Cardinal, LLC

George H. (Buddy) Richardson, P.G.
Manager Hydrogeology

Attachments: Table 1 - Summary of Laboratory Analytical Results for Deep Soil Samples
Table 2 - Summary of Laboratory Analytical Results for Shallow Soil Samples
Figure 1 - Site Location and Topographic Features
Figure 2 - Basin Environmental Sample Locations and Results
Figure 3 - EM38 0.5m/VD Survey Results with Sample Locations
Figure 4 - EM38 1m/VD Survey Results with Sample Locations
Appendix A - FEM's Form C-141 and NMOCD Response
Appendix B - EM38 Field Measurements
Appendix C - Boring Records
Appendix D - Laboratory Report and Chain-of-Custody

xc (w/attms): Ms. Amber Groves, New Mexico State Land Office, Hobbs, NM
Ms. Rachel Grant, Foundation Energy Management, Tulsa, OK
Ms. Alyssa Beard, Foundation Energy Management, Denver, CO

TABLES

Table 1 : Summary of Laboratory Analytical Results for Deep Soil Samples
Foundation Energy Management, Chalupa #4 SWD Wellhead Release
NMOCD # 1R-4632, Lea County, New Mexico

Sample ID	Sample Date	Depth	Lab Chloride (mg/kg)	Field Chloride Reading (ppm)
BH-3	1-Nov-17	(0-1 ft)	121	1,097
		(1-2 ft)	2,330	3,045
		(2-3 ft)	3,710	4,637
		(3-4 ft)	644	2,442
		(4-5 ft)	1,020	2,428
		(5-6 ft)	1,340	1,866
		(9-10 ft)	1,740	3,635
		(14-15 ft)	201	4,198
		(19-20 ft)	1,210	4,129
		(24-25 ft)	1,370	2,648
		(29-30 ft)	938	1,290
		(34-35 ft)	123	837
		(39-40 ft)	158	357
		(44-45 ft)	17	151
		(49-50 ft)	31.7	151
		(54-55 ft)	44	178
BH-4	1-Nov-17	(0-1 ft)	4,610	5,172
		(1-2 ft)	3,170	3,745
		(2-3 ft)	1,810	2,606
		(3-4 ft)	714	2,373
		(4-5 ft)	1,390	1,838
		(5-6 ft)	1,020	2,140
		(9-10 ft)	1,630	2,593
		(14-15 ft)	2,150	4,884
		(19-20 ft)	2,080	4,198
		(24-25 ft)	1,060	3,649
		(29-30 ft)	1,710	2,620
		(34-35 ft)	714	NS
		(39-40 ft)	1,780	2,853
		(44-45 ft)	1,400	2,620
		(49-50 ft)	3,440	1,660
		(54-55 ft)	1,020	1,125
		(59-60 ft)	256	412
		(64-65 ft)	179	302
		(69-70 ft)	106	233
		(74-75 ft)	110	178

Notes:

1. mg/kg: denotes milligrams per kilogram.
2. ft: denotes feet.
3. ppm: denotes parts per million.
4. Blue shaded blocks denote sample results that are greater than the laboratory's Reporting Limit (RL).
5. Regulatory Limit: denotes 600 mg/kg.
6. Values in red font exceed the regulatory limit.
7. Field chloride values detemined by measuring salinity with a meter and converting to TSS and then chloride.
8. NS: denotes no sample.

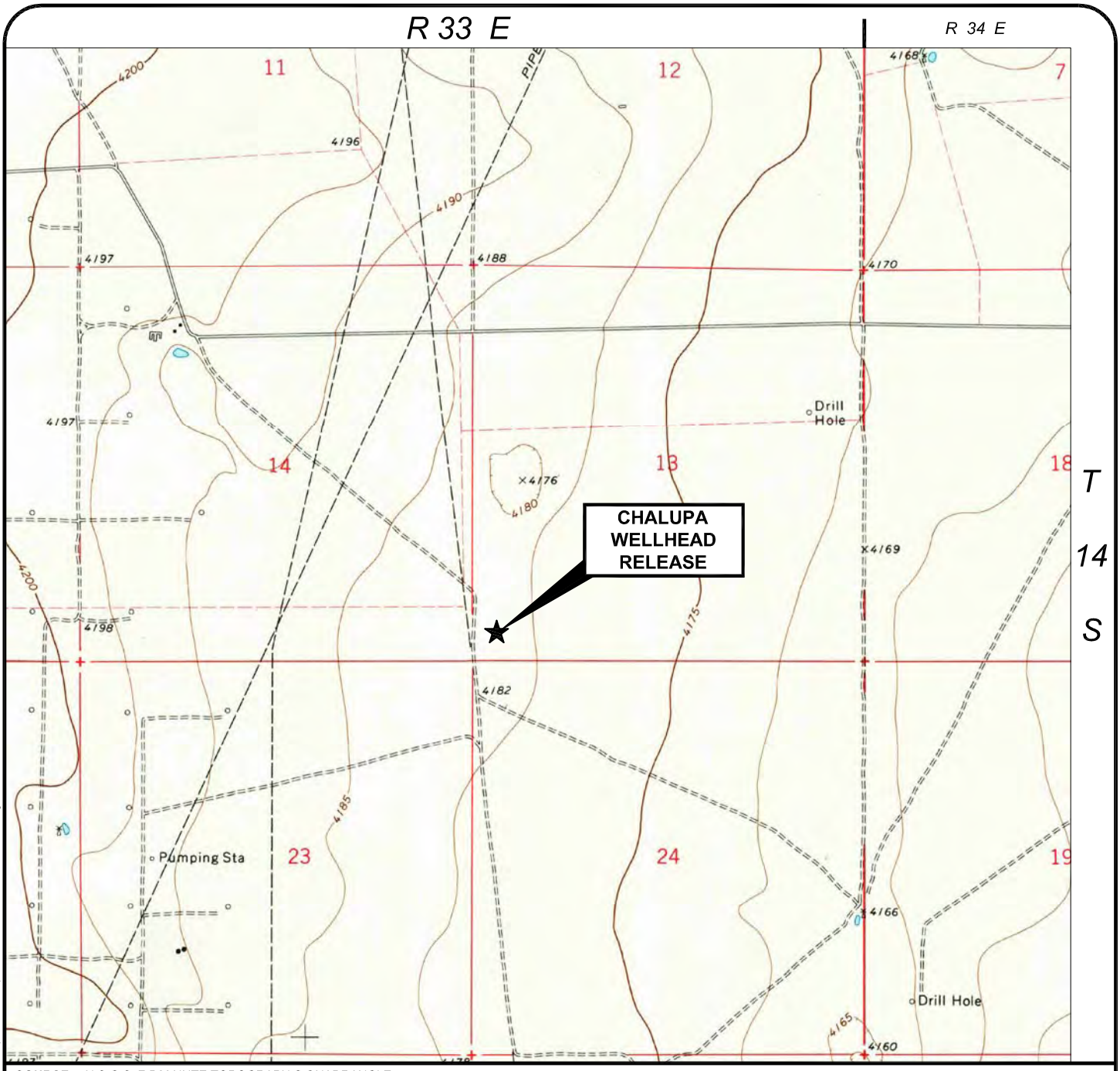
Table 2 : Summary of Laboratory Analytical Results for Shallow Soil Samples
Foundation Energy Management, Chalupa #4 SWD Wellhead Release
NMOCD # 1R-4632, Lea County, New Mexico

Sample ID	Sample Date	Depth	Chloride (mg/kg)
HA-9	1-Nov-17	(0-1 ft)	596
		(1-2 ft)	626
		(2-3 ft)	383
		(3-4 ft)	129
		(4-5 ft)	118
		(5-6 ft)	101
HA-10	1-Nov-17	(0-1 ft)	1,950
		(1-2 ft)	775
		(2-3 ft)	2,380
		(3-4 ft)	1,580
		(4-5 ft)	2,650
		(5-6 ft)	2,820
HA-11	1-Nov-17	(0-1 ft)	263
		(1-2 ft)	1,510
		(2-3 ft)	1,960
		(3-4 ft)	1,130
		(4-5 ft)	1,070
		(5-6 ft)	1,740
HA-12	1-Nov-17	(0-1 ft)	1,610
		(1-2 ft)	1,560
		(2-3 ft)	377
		(3-4 ft)	2,150
		(4-5 ft)	379
		(5-6 ft)	273
HA-13	1-Nov-17	(0-1 ft)	234
		(1-2 ft)	2,680
		(2-3 ft)	185
		(3-4 ft)	1,310
		(4-5 ft)	373
		(5-6 ft)	1,330
HA-14	1-Nov-17	(0-1 ft)	3,270
		(1-2 ft)	2,850
		(2-3 ft)	2,100
		(3-4 ft)	2,140
		(4-5 ft)	4,210
		(5-6 ft)	2,770

Notes:

1. mg/kg: denotes milligrams per kilogram.
2. ft: denotes feet.
3. ppm: denotes parts per million.
4. Blue shaded blocks denote sample results that are greater than the laboratory's Reporting Limit (RL).
5. Regulatory Limit: denotes 600 mg/kg.
6. Values in red font exceed the regulatory limit.

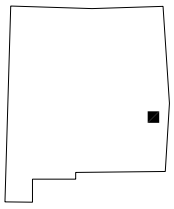
FIGURES



SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE
FORT RANCH, NEW MEXICO 1973

SCALE
0 1/2 1 MILE

NEW MEXICO



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CLIENT	FOUNDATION ENERGY MANAGEMENT TULSA, OKLAHOMA
FIGURE TITLE	***SITE LOCATION AND TOPOGRAPHIC FEATURES***
LOCATION	SEC. 13, T14S, R33E LEA COUNTY, NEW MEXICO
DOCUMENT TITLE	RELEASE CHARACTERIZATION REPORT

ENVIRO CLEAN CARDINAL

Enviro Clean Cardinal, LLC
7060 South Yale Avenue, Suite 603
Tulsa, Oklahoma 74136
918.794.7828
www.ECCGRP.com

		DESIGNED BY	GHR
DATE	2/16/2018	APPROVED BY	GHR
SCALE	AS SHOWN	DRAWN BY	SKG
PROJECT NUMBER		FIGURE NUMBER	
FEMHCHAPS1		1	

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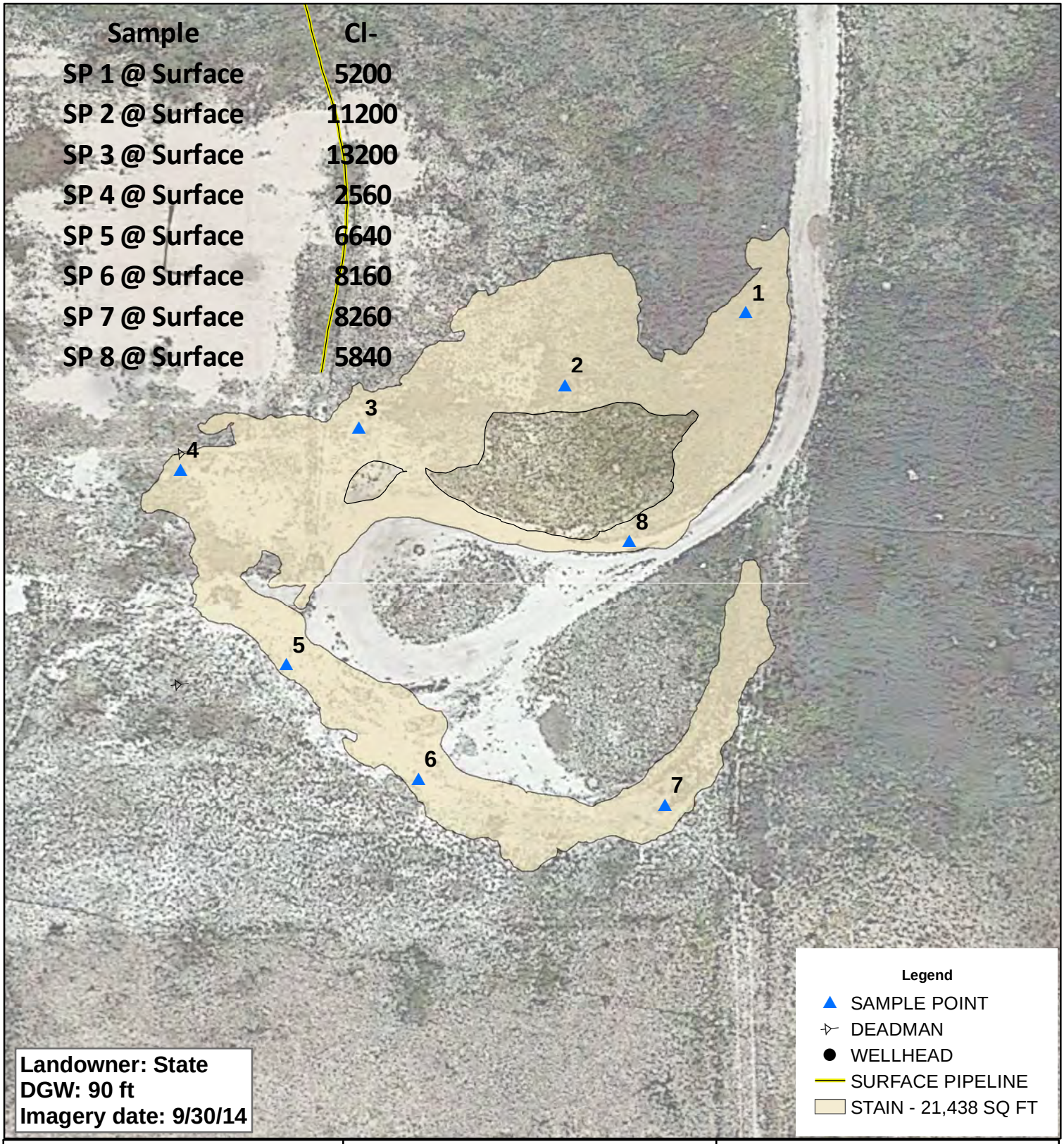

Basin Environmental Effective Solutions Service Technologies

FOUNDATION CHALUPA #4 SWD SOUTH AREA

UL M SECTION 13
T-14-S R-33-E
LEA COOUNTY, NM

GPS: 33.098196 -103.575450

FIGURE 2

0 25 50 Feet

N W E S

GPS date: 3/14/17 TG, 5/16/17 RR
Drawing date: 5/25/17
Drafted by: T. Grieco

ABOVE GROUND FLOWLINE

APPROXIMATE POINT OF RELEASE

SP#1
SP#2
SP#3
SP#4
SP#5
SP#6
SP#7
SP#8
BH-3
BH-4
HA-11
HA-10
HA-14
HA-13
HA-12
HA-9

LEGEND

- LOCATIONS OF EM38-MK2 GROUND CONDUCTIVITY MEASUREMENTS
- APPROXIMATE POINT OF RELEASE
- SP#1 — SOIL SAMPLE LOCATION COLLECTED BY BASIN ENVIRONMENTAL
- HA-9 — SOIL SAMPLE LOCATION COLLECTED BY ENVIRO CLEAN CARDINAL ON 11/1/2017
- APPROXIMATE LOCATION OF ABOVE GROUND FLOWLINE

APPARENT GROUND CONDUCTIVITIES

Minimum mmhos/m	Maximum mmhos/m	Color
0	50	
50	100	
100	150	
150	200	
200	250	
250	300	
300	350+	

N

20 0 20 40
SCALE FEET

NOTES:

1) EM SURVEY PERFORMED BY ENVIRO CLEAN CARDINAL, LLC ON OCTOBER 31, 2017.
2) EM SURVEY CONDUCTED BY GEORGE H. RICHARDSON, P.G. USING GEONICS EM38-MK2 GROUND CONDUCTIVITY METER.
3) AERIAL PHOTOGRAPH DATED OCTOBER 26, 2010, GEOREFRENCED ESRI

ENVIRO CLEAN CARDINAL
Enviro Clean Cardinal, LLC
7060 South Yale Avenue, Suite 603
Tulsa, Oklahoma 74136
918.794.7828
www.ECCGRP.com

DOCUMENT TITLE: RELEASE CHARACTERIZATION REPORT

FIGURE TITLE: ***EM38 0.5-METER VD SURVEY RESULTS WITH SAMPLE LOCATIONS***

CLIENT: FOUNDATION ENERGY MANAGEMENT, LLC TULSA, OKLAHOMA

LOCATION: CHALUPA #4 SWD WELL SITE SEC. 13, T14S, R33E, LEA COUNTY, NEW MEXICO

DESIGNED BY	GHR		
APPROVED BY	GHR	SCALE	1"= 40'
DRAWN BY	SKG	DATE	2/16/2018

PROJECT NUMBER	FIGURE NUMBER
FEMHCHAPS1	3

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ABOVE GROUND FLOWLINE

APPROXIMATE POINT OF RELEASE

SP#1
SP#2
SP#3
SP#4
SP#5
SP#6
SP#7
SP#8
BH-3
BH-4
HA-9
HA-10
HA-11
HA-12
HA-13
HA-14

LEGEND

- LOCATIONS OF EM38-MK2 GROUND CONDUCTIVITY MEASUREMENTS
- APPROXIMATE POINT OF RELEASE
- SP#1 — SOIL SAMPLE LOCATION COLLECTED BY BASIN ENVIRONMENTAL
- HA-9 — SOIL SAMPLE LOCATION COLLECTED BY ENVIRO CLEAN CARDINAL ON 11/1/2017
- APPROXIMATE LOCATION OF ABOVE GROUND FLOWLINE

APPARENT GROUND CONDUCTIVITIES

Minimum mmhos/m	Maximum mmhos/m	Color
0	50	
50	100	
100	150	
150	200	
200	250	
250	300	
300	350+	

N

20 0 20 40
SCALE FEET

NOTES:

1) EM SURVEY PERFORMED BY ENVIRO CLEAN CARDINAL, LLC ON OCTOBER 31, 2017.
2) EM SURVEY CONDUCTED BY GEORGE H. RICHARDSON, P.G. USING GEONICS EM38-MK2 GROUND CONDUCTIVITY METER.
3) AERIAL PHOTOGRAPH DATED OCTOBER 26, 2010, GEOREFRENCED ESRI

ENVIRO CLEAN CARDINAL
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Tulsa, Oklahoma 74136
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DOCUMENT TITLE: RELEASE CHARACTERIZATION REPORT

FIGURE TITLE: *EM38 1.0-METER VD SURVEY RESULTS WITH SAMPLE LOCATIONS*

CLIENT: FOUNDATION ENERGY MANAGEMENT, LLC TULSA, OKLAHOMA

LOCATION: CHALUPA #4 SWD WELL SITE SEC. 13, T14S, R33E, LEA COUNTY, NEW MEXICO

DESIGNED BY	GHR		
APPROVED BY	GHR	SCALE	1"= 40'
DRAWN BY	SKG	DATE	2/16/2018

PROJECT NUMBER	FIGURE NUMBER
FEMHCHAPS1	4

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APPENDIX A

FEM'S FORM C-141 AND NMOCD RESPONSE

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Foundation Energy Management, LLC	Contact Rachel Grant
Address 16000 Dallas Parkway, Suite 875	Telephone No. 918-526-5592
Facility Name Chalupa SWD	Facility Type Salt water disposal well

Surface Owner	Mineral Owner	API No. 30-025-29184

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	13	14S	33E	330	South	330	West	Lea

Latitude 33.0982437 Longitude -103.5753937

NATURE OF RELEASE

Type of Release Saltwater	Volume of Release 125 bbls	Volume Recovered 25 bbls
Source of Release Injection hose came loose because of corroded clamps	Date and Hour of Occurrence	Date and Hour of Discovery 2/23/2017, 12pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu	
By Whom? Rachel Grant	Date and Hour 2/24/2017, 9am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

RECEIVED
By Olivia Yu at 8:15 am, Mar 07, 2017

Describe Cause of Problem and Remedial Action Taken.* Vacuum truck was called out immediately to vacuum free-standing fluid on location. Roustabout service was called to replace the flexible hose with a new one and use hammer unions to connect the hose to the injection line to prevent future spills.

Describe Area Affected and Cleanup Action Taken.* Working procedure for remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION
Printed Name: Rachel Grant	Approved by Environmental Specialist:
Title: HSE/Regulatory Manager	Approval Date: 3/7/2017 Expiration Date:
E-mail Address: regulatory@foundationenergy.com	Conditions of Approval: see attached directive Attached ☑
Date: 3/6/17 Phone: 918-526-5592	

* Attach Additional Sheets If Necessary

1RP-4632 pOY1706631065 nOY1706630747

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/7/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4632_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/7/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

APPENDIX B

EM38 FIELD MEASUREMENTS

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1	0.0	33.09772910	-103.57502106	16.95	0.14	13.24	0.34
2	0.5	33.09772917	-103.57502097	16.80	0.14	13.32	0.34
3	1.0	33.09772920	-103.57502091	17.15	0.14	12.66	0.36
4	1.6	33.09772921	-103.57502086	17.07	0.14	13.16	0.36
5	2.1	33.09772925	-103.57502076	17.03	0.14	13.01	0.33
6	2.6	33.09772928	-103.57502064	17.50	0.14	12.73	0.35
7	3.1	33.09772995	-103.57501936	17.15	0.15	12.62	0.38
8	3.7	33.09773073	-103.57501788	17.42	0.17	13.52	0.41
9	4.2	33.09772995	-103.57501873	19.41	0.18	13.48	0.44
10	4.7	33.09772913	-103.57501963	13.52	0.09	12.97	0.39
11	5.2	33.09773069	-103.57501782	9.65	0.04	12.19	0.31
12	5.7	33.09773234	-103.57501572	9.45	0.02	11.60	0.26
13	6.3	33.09773459	-103.57501162	11.64	-0.02	12.58	0.24
14	6.8	33.09773716	-103.57500752	8.20	0.02	11.37	0.26
15	7.3	33.09774103	-103.57500339	10.82	-0.01	11.91	0.24
16	7.8	33.09774508	-103.57499934	7.54	0.05	11.29	0.26
17	8.4	33.09774949	-103.57499561	8.75	0.04	11.45	0.26
18	8.9	33.09775374	-103.57499189	10.94	0.01	11.80	0.27
19	9.4	33.09775768	-103.57498826	8.59	0.04	11.29	0.29
20	9.9	33.09776178	-103.57498473	9.10	0.00	11.25	0.26
21	10.4	33.09776608	-103.57498130	8.01	0.03	10.98	0.27
22	11.0	33.09777051	-103.57497809	10.00	0.01	11.33	0.28
23	11.5	33.09777506	-103.57497508	9.30	0.03	11.21	0.29
24	12.0	33.09777979	-103.57497208	8.01	0.03	10.90	0.30
25	12.5	33.09778462	-103.57496911	8.91	0.02	10.74	0.27
26	13.1	33.09778964	-103.57496626	7.77	0.02	11.17	0.24
27	13.6	33.09779474	-103.57496345	10.59	-0.01	11.41	0.19
28	14.1	33.09779993	-103.57496097	7.97	0.03	11.41	0.22
29	14.6	33.09780514	-103.57495857	10.82	-0.01	11.64	0.23
30	15.1	33.09781047	-103.57495566	9.06	0.03	11.52	0.25
31	15.7	33.09781582	-103.57495268	9.02	0.03	11.52	0.25
32	16.2	33.09782115	-103.57494972	10.90	0.02	11.95	0.28
33	16.7	33.09782647	-103.57494677	9.88	0.03	11.52	0.29
34	17.2	33.09783158	-103.57494433	13.40	0.00	12.62	0.27
35	17.8	33.09783669	-103.57494191	9.53	0.04	11.84	0.32
36	18.3	33.09784194	-103.57493960	12.66	-0.02	12.34	0.30
37	18.8	33.09784735	-103.57493728	10.27	0.03	12.46	0.36
38	19.3	33.09785344	-103.57493487	14.06	-0.01	12.58	0.36
39	19.8	33.09785938	-103.57493250	12.19	0.01	13.87	0.36
40	20.4	33.09786501	-103.57493023	14.65	-0.04	14.61	0.35
41	20.9	33.09787071	-103.57492806	14.30	-0.02	14.77	0.38
42	21.4	33.09787654	-103.57492603	15.55	-0.04	16.21	0.36
43	21.9	33.09788203	-103.57492373	18.16	-0.05	17.38	0.37
44	22.5	33.09788714	-103.57492111	19.88	-0.06	19.96	0.34
45	23.0	33.09789270	-103.57491827	20.74	-0.07	22.27	0.29
46	23.5	33.09789867	-103.57491521	22.07	-0.05	22.89	0.35
47	24.0	33.09790429	-103.57491232	22.77	-0.05	22.31	0.33
48	24.5	33.09790974	-103.57490950	20.43	-0.04	23.09	0.32
49	25.1	33.09791509	-103.57490638	22.15	-0.08	23.13	0.23
50	25.6	33.09792041	-103.57490315	20.82	-0.04	22.62	0.27
51	26.1	33.09792568	-103.57489998	21.21	-0.07	21.91	0.27
52	26.6	33.09793093	-103.57489682	18.75	-0.05	20.39	0.25
53	27.1	33.09793633	-103.57489369	16.68	-0.06	20.51	0.26
54	27.7	33.09794175	-103.57489056	16.21	-0.06	20.82	0.27
55	28.2	33.09794719	-103.57488749	14.69	-0.07	18.98	0.26
56	28.7	33.09795263	-103.57488441	15.59	-0.08	18.63	0.27
57	29.2	33.09795804	-103.57488101	14.53	-0.05	17.50	0.26
58	29.8	33.09796345	-103.57487763	16.06	-0.07	17.89	0.23
59	30.3	33.09796881	-103.57487435	13.71	-0.03	17.27	0.23
60	30.8	33.09797422	-103.57487108	14.53	-0.05	16.45	0.11
61	31.3	33.09797970	-103.57486788	13.16	-0.02	15.20	0.05
62	31.9	33.09798518	-103.57486457	14.34	-0.05	16.64	0.17

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
63	32.4	33.09799067	-103.57486102	12.38	-0.02	16.45	0.22
64	32.9	33.09799632	-103.57485763	13.95	-0.04	17.03	0.23
65	33.4	33.09800223	-103.57485445	11.60	0.00	17.31	0.23
66	33.9	33.09800805	-103.57485142	13.98	-0.03	17.81	0.25
67	34.5	33.09801379	-103.57484855	17.34	-0.04	19.14	0.27
68	35.0	33.09801978	-103.57484586	17.46	-0.03	19.45	0.28
69	35.5	33.09802590	-103.57484335	18.83	-0.03	20.86	0.27
70	36.0	33.09803186	-103.57484134	17.07	-0.01	21.68	0.28
71	36.6	33.09803775	-103.57483959	17.97	-0.03	22.34	0.23
72	37.1	33.09804349	-103.57483764	16.45	0.00	22.54	0.19
73	37.6	33.09804915	-103.57483564	18.56	-0.01	24.38	0.17
74	38.1	33.09805491	-103.57483340	19.49	0.02	25.94	0.18
75	38.6	33.09806069	-103.57483112	23.40	0.00	28.63	0.16
76	39.2	33.09806630	-103.57482861	30.12	0.00	33.91	0.24
77	39.7	33.09807190	-103.57482607	34.65	-0.04	37.11	0.17
78	40.2	33.09807711	-103.57482350	33.32	-0.07	42.38	0.07
79	40.7	33.09808227	-103.57482094	42.11	-0.05	42.11	-0.43
80	41.3	33.09808703	-103.57481842	46.76	-0.06	54.06	0.10
81	41.8	33.09809186	-103.57481577	46.25	-0.03	58.36	0.24
82	42.3	33.09809666	-103.57481272	46.60	-0.03	59.81	0.22
83	42.8	33.09810156	-103.57480980	47.70	-0.01	62.73	0.24
84	43.3	33.09810663	-103.57480733	52.58	-0.04	66.02	0.20
85	43.9	33.09811163	-103.57480491	58.36	-0.02	72.58	0.24
86	44.4	33.09811645	-103.57480263	63.87	-0.05	80.90	0.23
87	44.9	33.09812126	-103.57480038	68.59	-0.03	85.12	0.25
88	45.4	33.09812606	-103.57479814	75.31	-0.05	90.47	0.28
89	46.0	33.09813107	-103.57479592	78.24	-0.06	96.52	0.29
90	46.5	33.09813625	-103.57479371	77.73	-0.03	98.16	0.30
91	47.0	33.09814132	-103.57479181	76.72	-0.06	96.91	0.25
92	47.5	33.09814633	-103.57479012	75.27	-0.04	98.01	0.28
93	48.0	33.09815125	-103.57478831	79.61	-0.08	98.67	0.32
94	48.6	33.09815614	-103.57478645	77.42	-0.05	97.27	0.31
95	49.1	33.09816144	-103.57478479	72.31	-0.04	91.99	0.32
96	49.6	33.09816686	-103.57478319	69.81	-0.06	88.48	0.31
97	50.1	33.09817210	-103.57478169	64.65	-0.04	85.23	0.31
98	50.7	33.09817733	-103.57478021	64.96	-0.07	83.98	0.29
99	51.2	33.09818254	-103.57477909	63.79	-0.04	81.95	0.31
100	51.7	33.09818778	-103.57477800	66.13	-0.08	79.18	0.24
101	52.2	33.09819344	-103.57477692	61.91	-0.03	77.42	0.27
102	52.7	33.09819907	-103.57477576	61.52	-0.06	77.46	0.25
103	53.3	33.09820449	-103.57477397	65.23	-0.06	80.70	0.30
104	53.8	33.09820988	-103.57477215	66.13	-0.05	79.77	0.30
105	54.3	33.09821515	-103.57477020	68.98	-0.07	81.91	0.30
106	54.8	33.09822050	-103.57476825	66.29	-0.05	83.13	0.31
107	55.4	33.09822595	-103.57476637	66.25	-0.08	82.19	0.29
108	55.9	33.09823155	-103.57476469	62.07	-0.03	79.69	0.33
109	56.4	33.09823738	-103.57476339	63.16	-0.09	76.88	0.28
110	56.9	33.09824302	-103.57476218	58.16	-0.03	73.01	0.32
111	57.4	33.09824843	-103.57476110	55.78	-0.07	70.27	0.31
112	58.0	33.09825392	-103.57475987	55.66	-0.05	68.59	0.31
113	58.5	33.09825948	-103.57475850	53.09	-0.05	67.07	0.29
114	59.0	33.09826512	-103.57475689	54.02	-0.06	64.77	0.31
115	59.5	33.09827085	-103.57475513	51.09	-0.04	62.58	0.33
116	60.1	33.09827649	-103.57475351	50.66	-0.07	61.13	0.29
117	60.6	33.09828213	-103.57475195	50.27	-0.04	60.98	0.33
118	61.1	33.09828736	-103.57475036	52.73	-0.07	60.08	0.30
119	61.6	33.09829250	-103.57474877	45.16	-0.01	54.38	0.31
120	62.1	33.09829757	-103.57474671	43.52	-0.07	51.25	0.28
121	62.7	33.09830264	-103.57474457	38.83	-0.03	49.81	0.32
122	63.2	33.09830833	-103.57474278	38.83	-0.08	46.48	0.30
123	63.7	33.09831405	-103.57474100	36.45	-0.04	45.04	0.33
124	64.2	33.09831945	-103.57473917	34.02	-0.04	41.80	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
125	64.8	33.09832490	-103.57473738	33.75	-0.05	38.75	0.34
126	65.3	33.09833063	-103.57473588	31.48	-0.03	37.58	0.35
127	65.8	33.09833636	-103.57473429	32.89	-0.06	35.63	0.35
128	66.3	33.09834208	-103.57473235	29.69	-0.03	33.40	0.34
129	66.8	33.09834787	-103.57473058	30.90	-0.08	32.27	0.29
130	67.4	33.09835386	-103.57472919	26.37	-0.03	30.86	0.33
131	67.9	33.09835964	-103.57472773	25.94	-0.07	28.01	0.29
132	68.4	33.09836509	-103.57472613	23.95	-0.04	26.45	0.33
133	68.9	33.09837070	-103.57472459	24.30	-0.07	27.62	0.32
134	69.5	33.09837645	-103.57472311	22.46	-0.03	26.37	0.32
135	70.0	33.09838214	-103.57472148	22.73	-0.05	25.86	0.32
136	70.5	33.09838777	-103.57471974	22.77	-0.05	23.95	0.33
137	71.0	33.09839364	-103.57471811	21.37	-0.03	24.81	0.35
138	71.5	33.09839961	-103.57471654	22.38	-0.06	23.32	0.35
139	72.1	33.09840558	-103.57471484	19.84	-0.03	22.54	0.38
140	72.6	33.09841153	-103.57471309	23.05	-0.10	23.32	0.31
141	73.1	33.09841746	-103.57471203	19.30	-0.05	21.68	0.36
142	73.6	33.09842338	-103.57471114	19.41	-0.08	21.33	0.33
143	74.1	33.09842981	-103.57470973	18.75	-0.05	21.33	0.34
144	74.7	33.09843627	-103.57470827	22.07	-0.08	22.23	0.32
145	75.2	33.09844243	-103.57470640	19.88	-0.03	21.64	0.33
146	75.7	33.09844853	-103.57470453	20.74	-0.06	21.17	0.33
147	76.2	33.09845452	-103.57470284	20.31	-0.04	20.94	0.33
148	76.8	33.09846055	-103.57470123	19.84	-0.07	19.73	0.34
149	77.3	33.09846686	-103.57469997	20.16	-0.05	20.74	0.35
150	77.8	33.09847312	-103.57469866	16.76	-0.04	20.16	0.33
151	78.3	33.09847917	-103.57469721	17.81	-0.06	18.91	0.31
152	78.9	33.09848515	-103.57469581	16.56	-0.04	18.13	0.36
153	79.4	33.09849103	-103.57469451	19.10	-0.07	18.40	0.31
154	79.9	33.09849702	-103.57469336	16.68	-0.04	18.98	0.36
155	80.4	33.09850313	-103.57469243	16.76	-0.07	18.79	0.32
156	80.9	33.09850913	-103.57469117	17.27	-0.03	19.06	0.34
157	81.5	33.09851503	-103.57468957	21.02	-0.07	21.06	0.35
158	82.0	33.09852090	-103.57468812	20.20	-0.03	20.74	0.36
159	82.5	33.09852676	-103.57468677	20.82	-0.06	21.41	0.33
160	83.0	33.09853291	-103.57468561	20.86	-0.04	21.72	0.34
161	83.6	33.09853923	-103.57468453	20.35	-0.06	21.45	0.32
162	84.1	33.09854571	-103.57468320	19.88	-0.05	21.45	0.34
163	84.6	33.09855223	-103.57468178	19.18	-0.04	21.02	0.36
164	85.1	33.09855832	-103.57468009	17.89	-0.02	19.49	0.34
165	85.6	33.09856433	-103.57467834	16.52	-0.02	18.05	0.33
166	86.2	33.09857044	-103.57467703	16.13	-0.06	16.76	0.28
167	86.7	33.09857656	-103.57467576	13.79	-0.03	16.99	0.34
168	87.2	33.09858230	-103.57467435	15.82	-0.06	15.59	0.32
169	87.7	33.09858800	-103.57467291	13.56	-0.02	13.91	0.39
170	88.3	33.09859325	-103.57467108	14.30	-0.06	14.38	0.34
171	88.8	33.09859852	-103.57466934	13.24	-0.04	14.18	0.35
172	89.3	33.09860356	-103.57466810	11.72	-0.03	13.67	0.34
173	89.8	33.09860757	-103.57466673	10.23	0.01	12.97	0.34
174	90.3	33.09860860	-103.57466498	8.36	0.07	12.73	0.35
175	90.9	33.09860898	-103.57466263	9.92	0.06	12.46	0.36
176	91.4	33.09860814	-103.57465914	11.21	0.01	12.93	0.35
177	91.9	33.09860688	-103.57465464	14.38	-0.04	13.32	0.33
178	92.4	33.09860506	-103.57464877	15.20	-0.04	14.69	0.36
179	93.0	33.09860319	-103.57464227	11.84	0.00	13.95	0.39
180	93.5	33.09860128	-103.57463515	14.49	-0.05	14.38	0.36
181	94.0	33.09859932	-103.57462791	13.79	-0.02	13.91	0.38
182	94.5	33.09859733	-103.57462057	13.05	-0.03	13.56	0.38
183	95.0	33.09859516	-103.57461323	14.57	-0.05	14.57	0.37
184	95.6	33.09859288	-103.57460585	12.81	-0.02	13.48	0.35
185	96.1	33.09859005	-103.57459935	14.45	-0.06	13.59	0.30
186	96.6	33.09858705	-103.57459312	13.20	-0.03	14.14	0.32

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
187	97.1	33.09858415	-103.57458638	12.31	-0.03	14.57	0.35
188	97.7	33.09858127	-103.57457954	14.22	-0.06	15.00	0.36
189	98.2	33.09857910	-103.57457462	12.34	-0.01	14.53	0.31
190	98.7	33.09857695	-103.57456998	12.42	0.01	13.98	0.31
191	99.2	33.09857327	-103.57457045	12.62	0.03	13.56	0.31
192	99.7	33.09856942	-103.57457113	14.34	-0.02	14.22	0.32
193	100.3	33.09856421	-103.57457347	14.73	-0.01	15.39	0.37
194	100.8	33.09855890	-103.57457597	14.30	-0.01	17.11	0.39
195	101.3	33.09855320	-103.57457911	17.89	-0.03	17.42	0.39
196	101.8	33.09854740	-103.57458202	16.88	-0.01	17.54	0.39
197	102.4	33.09854155	-103.57458426	20.00	-0.06	20.23	0.37
198	102.9	33.09853553	-103.57458651	18.32	-0.03	20.20	0.38
199	103.4	33.09852936	-103.57458870	23.05	-0.08	21.29	0.31
200	103.9	33.09852337	-103.57459070	22.23	-0.02	22.77	0.34
201	104.4	33.09851764	-103.57459245	22.85	-0.05	22.85	0.33
202	105.0	33.09851155	-103.57459433	22.54	-0.04	25.20	0.31
203	105.5	33.09850515	-103.57459633	21.80	-0.04	25.35	0.30
204	106.0	33.09849899	-103.57459850	23.83	-0.06	26.02	0.28
205	106.5	33.09849300	-103.57460076	22.19	-0.03	25.12	0.32
206	107.1	33.09848739	-103.57460301	26.60	-0.07	28.01	0.30
207	107.6	33.09848199	-103.57460523	22.46	0.00	26.72	0.36
208	108.1	33.09847686	-103.57460768	24.06	-0.06	28.01	0.29
209	108.6	33.09847181	-103.57461019	22.31	-0.03	28.05	0.33
210	109.1	33.09846646	-103.57461249	23.13	-0.06	28.59	0.32
211	109.7	33.09846109	-103.57461476	24.45	-0.05	28.36	0.32
212	110.2	33.09845566	-103.57461705	22.89	-0.03	28.63	0.36
213	110.7	33.09845027	-103.57461935	24.57	-0.07	28.95	0.31
214	111.2	33.09844531	-103.57462201	21.72	-0.04	27.97	0.30
215	111.8	33.09844033	-103.57462451	22.85	-0.08	28.44	0.28
216	112.3	33.09843533	-103.57462596	22.27	-0.02	28.87	0.34
217	112.8	33.09843030	-103.57462733	23.79	-0.07	29.22	0.29
218	113.3	33.09842518	-103.57462843	21.95	-0.03	29.22	0.32
219	113.8	33.09842005	-103.57462969	22.15	-0.04	29.22	0.29
220	114.4	33.09841490	-103.57463133	23.05	-0.07	29.18	0.26
221	114.9	33.09840965	-103.57463306	21.68	-0.05	28.20	0.26
222	115.4	33.09840421	-103.57463494	24.26	-0.09	28.87	0.23
223	115.9	33.09839879	-103.57463653	22.19	-0.02	28.71	0.29
224	116.5	33.09839343	-103.57463778	23.59	-0.04	28.91	0.29
225	117.0	33.09838813	-103.57463934	24.10	-0.03	28.98	0.31
226	117.5	33.09838288	-103.57464114	22.31	-0.02	29.02	0.32
227	118.0	33.09837771	-103.57464294	24.81	-0.06	29.53	0.30
228	118.5	33.09837262	-103.57464472	22.46	-0.02	29.02	0.33
229	119.1	33.09836771	-103.57464672	24.69	-0.06	28.52	0.30
230	119.6	33.09836286	-103.57464883	23.01	-0.01	28.71	0.32
231	120.1	33.09835750	-103.57465034	23.63	-0.03	28.87	0.30
232	120.6	33.09835200	-103.57465172	25.86	-0.05	29.18	0.29
233	121.1	33.09834711	-103.57465312	24.69	-0.04	29.88	0.29
234	121.7	33.09834228	-103.57465452	28.44	-0.08	31.60	0.27
235	122.2	33.09833692	-103.57465620	26.60	-0.01	32.81	0.33
236	122.7	33.09833160	-103.57465785	29.18	-0.05	33.28	0.33
237	123.2	33.09832720	-103.57465893	29.96	-0.05	35.78	0.33
238	123.8	33.09832274	-103.57465991	31.56	-0.02	37.66	0.35
239	124.3	33.09831798	-103.57466031	33.09	-0.05	38.71	0.27
240	124.8	33.09831321	-103.57466061	33.79	-0.01	39.65	0.32
241	125.3	33.09830842	-103.57466063	36.48	-0.04	40.31	0.30
242	125.9	33.09830357	-103.57466098	37.89	-0.04	43.48	0.30
243	126.4	33.09829859	-103.57466206	39.81	-0.03	46.41	0.33
244	126.9	33.09829394	-103.57466339	41.72	-0.06	47.15	0.27
245	127.4	33.09828972	-103.57466510	40.20	-0.02	47.50	0.29
246	127.9	33.09828552	-103.57466685	40.66	-0.03	48.36	0.32
247	128.5	33.09828134	-103.57466866	42.73	-0.08	48.91	0.31
248	129.0	33.09827700	-103.57467024	44.57	-0.01	51.41	0.37

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
249	129.5	33.09827255	-103.57467166	45.70	-0.06	49.73	0.35
250	130.0	33.09826816	-103.57467351	43.56	-0.05	48.32	0.37
251	130.6	33.09826379	-103.57467557	40.12	-0.02	45.82	0.37
252	131.1	33.09825955	-103.57467782	40.43	-0.09	44.22	0.29
253	131.6	33.09825532	-103.57468013	37.15	-0.02	43.52	0.33
254	132.1	33.09825083	-103.57468202	35.27	-0.04	42.58	0.31
255	132.6	33.09824629	-103.57468382	34.30	-0.07	41.17	0.30
256	133.2	33.09824184	-103.57468547	31.84	-0.05	39.57	0.32
257	133.7	33.09823740	-103.57468710	32.89	-0.09	38.48	0.28
258	134.2	33.09823282	-103.57468918	31.84	-0.05	37.85	0.30
259	134.7	33.09822824	-103.57469128	31.72	-0.03	37.15	0.33
260	135.3	33.09822362	-103.57469357	33.59	-0.07	38.48	0.30
261	135.8	33.09821888	-103.57469580	30.55	-0.04	36.76	0.31
262	136.3	33.09821399	-103.57469753	31.68	-0.08	36.76	0.33
263	136.8	33.09820912	-103.57469928	30.20	-0.04	36.60	0.34
264	137.3	33.09820446	-103.57470098	29.92	-0.04	36.37	0.33
265	137.9	33.09819978	-103.57470275	32.31	-0.08	36.64	0.29
266	138.4	33.09819508	-103.57470466	29.53	-0.04	35.98	0.33
267	138.9	33.09819033	-103.57470635	32.03	-0.10	36.06	0.28
268	139.4	33.09818548	-103.57470775	30.78	-0.05	36.52	0.31
269	140.0	33.09818056	-103.57470894	31.68	-0.05	37.42	0.30
270	140.5	33.09817558	-103.57470993	33.32	-0.06	39.10	0.31
271	141.0	33.09817047	-103.57471074	32.81	-0.04	39.65	0.29
272	141.5	33.09816532	-103.57471143	33.95	-0.07	41.09	0.22
273	142.0	33.09816030	-103.57471206	33.01	-0.01	42.77	0.25
274	142.6	33.09815536	-103.57471268	36.99	-0.05	47.03	0.23
275	143.1	33.09815028	-103.57471418	43.67	-0.05	52.62	0.28
276	143.6	33.09814518	-103.57471595	47.38	-0.04	56.64	0.33
277	144.1	33.09814051	-103.57471783	54.22	-0.09	60.04	0.29
278	144.7	33.09813592	-103.57471971	55.63	-0.02	63.75	0.34
279	145.2	33.09813134	-103.57472112	58.09	-0.07	67.11	0.32
280	145.7	33.09812678	-103.57472248	59.81	-0.06	71.68	0.33
281	146.2	33.09812336	-103.57472285	58.52	-0.04	72.19	0.34
282	146.7	33.09812031	-103.57472324	55.39	-0.02	71.68	0.35
283	147.3	33.09812010	-103.57472387	53.59	0.00	69.22	0.36
284	147.8	33.09811930	-103.57472451	54.34	-0.01	69.81	0.33
285	148.3	33.09811603	-103.57472520	56.33	-0.02	70.82	0.32
286	148.8	33.09811238	-103.57472611	58.05	-0.06	69.73	0.30
287	149.4	33.09810794	-103.57472753	55.55	-0.03	66.84	0.32
288	149.9	33.09810352	-103.57472909	54.02	-0.06	65.23	0.31
289	150.4	33.09809924	-103.57473087	52.19	-0.06	62.15	0.32
290	150.9	33.09809448	-103.57473251	48.40	-0.05	57.89	0.31
291	151.4	33.09808910	-103.57473398	47.23	-0.09	54.41	0.29
292	152.0	33.09808437	-103.57473506	38.79	0.01	51.02	0.29
293	152.5	33.09808023	-103.57473579	39.65	-0.04	50.35	0.27
294	153.0	33.09807566	-103.57473677	43.75	-0.07	50.39	0.28
295	153.5	33.09807082	-103.57473791	42.34	-0.03	50.74	0.32
296	154.1	33.09806605	-103.57473921	44.38	-0.08	49.77	0.28
297	154.6	33.09806130	-103.57474058	43.09	-0.04	49.61	0.34
298	155.1	33.09805625	-103.57474163	42.93	-0.05	49.02	0.34
299	155.6	33.09805110	-103.57474260	44.14	-0.08	48.95	0.32
300	156.1	33.09804643	-103.57474308	41.52	-0.04	48.40	0.33
301	156.7	33.09804184	-103.57474350	41.99	-0.09	47.38	0.30
302	157.2	33.09803692	-103.57474434	39.77	-0.05	44.77	0.33
303	157.7	33.09803199	-103.57474521	37.85	-0.05	42.81	0.33
304	158.2	33.09802728	-103.57474617	37.19	-0.07	40.63	0.30
305	158.8	33.09802246	-103.57474707	33.01	-0.05	36.95	0.33
306	159.3	33.09801706	-103.57474745	32.58	-0.09	35.90	0.31
307	159.8	33.09801174	-103.57474782	28.56	-0.05	34.57	0.35
308	160.3	33.09800677	-103.57474816	26.91	-0.05	33.75	0.35
309	160.8	33.09800161	-103.57474849	30.63	-0.09	33.13	0.34
310	161.4	33.09799611	-103.57474881	28.40	-0.05	30.39	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
311	161.9	33.09799070	-103.57474921	30.94	-0.10	30.00	0.32
312	162.4	33.09798544	-103.57474974	28.48	-0.05	30.12	0.36
313	162.9	33.09798008	-103.57475021	28.36	-0.06	28.24	0.37
314	163.5	33.09797460	-103.57475059	27.31	-0.05	26.09	0.37
315	164.0	33.09796925	-103.57475066	22.27	-0.02	24.10	0.39
316	164.5	33.09796396	-103.57475046	23.05	-0.08	23.87	0.32
317	165.0	33.09795891	-103.57474997	18.63	-0.02	20.43	0.34
318	165.5	33.09795399	-103.57474932	19.45	-0.07	19.45	0.34
319	166.1	33.09794883	-103.57474850	17.50	-0.04	19.57	0.35
320	166.6	33.09794359	-103.57474763	15.78	-0.04	17.97	0.35
321	167.1	33.09793815	-103.57474708	17.97	-0.07	18.40	0.30
322	167.6	33.09793265	-103.57474662	17.27	-0.03	17.54	0.37
323	168.1	33.09792741	-103.57474652	20.70	-0.10	16.56	0.31
324	168.7	33.09792221	-103.57474646	16.88	-0.04	15.35	0.35
325	169.2	33.09791670	-103.57474594	14.69	-0.04	15.86	0.34
326	169.7	33.09791117	-103.57474541	14.84	-0.04	14.81	0.33
327	170.2	33.09790566	-103.57474505	12.93	-0.01	13.67	0.38
328	170.8	33.09790012	-103.57474468	16.09	-0.06	14.77	0.35
329	171.3	33.09789429	-103.57474422	14.30	-0.01	13.40	0.34
330	171.8	33.09788845	-103.57474373	16.41	-0.07	13.32	0.30
331	172.3	33.09788245	-103.57474297	13.75	-0.02	13.24	0.33
332	172.8	33.09787642	-103.57474224	12.27	-0.01	12.19	0.35
333	173.4	33.09787028	-103.57474156	12.03	-0.02	10.98	0.34
334	173.9	33.09786409	-103.57474126	9.53	0.03	10.39	0.33
335	174.4	33.09785783	-103.57474152	11.41	-0.01	10.66	0.28
336	174.9	33.09785178	-103.57474150	9.41	0.03	9.26	0.33
337	175.5	33.09784592	-103.57474118	12.50	-0.03	10.00	0.28
338	176.0	33.09784007	-103.57474048	10.55	0.01	9.88	0.29
339	176.5	33.09783423	-103.57473951	10.31	-0.01	10.04	0.30
340	177.0	33.09782804	-103.57473899	10.66	0.03	9.88	0.32
341	177.6	33.09782167	-103.57473869	9.88	0.03	9.38	0.27
342	178.1	33.09781547	-103.57473853	10.23	0.01	9.73	0.27
343	178.6	33.09780936	-103.57473841	8.63	0.03	9.61	0.30
344	179.1	33.09780376	-103.57473842	12.07	-0.01	10.82	0.26
345	179.6	33.09779829	-103.57473846	9.49	0.02	9.96	0.28
346	180.2	33.09779281	-103.57473872	11.41	-0.02	9.45	0.25
347	180.7	33.09778734	-103.57473901	10.63	0.02	9.88	0.26
348	181.2	33.09778167	-103.57473877	10.82	-0.01	9.65	0.27
349	181.7	33.09777603	-103.57473839	12.23	-0.03	10.31	0.23
350	182.3	33.09777060	-103.57473674	10.20	-0.03	10.39	0.25
351	182.8	33.09776533	-103.57473500	13.28	-0.07	11.29	0.23
352	183.3	33.09776121	-103.57473299	10.43	-0.02	11.09	0.26
353	183.8	33.09775775	-103.57473040	12.03	-0.08	11.02	0.21
354	184.3	33.09775643	-103.57472622	12.07	-0.06	11.41	0.25
355	184.9	33.09775642	-103.57472177	11.95	-0.07	11.13	0.26
356	185.4	33.09775889	-103.57471681	11.72	-0.03	11.60	0.28
357	185.9	33.09776209	-103.57471235	9.49	-0.01	11.41	0.31
358	186.4	33.09776629	-103.57470853	11.06	-0.03	10.35	0.28
359	187.0	33.09777113	-103.57470514	9.06	-0.02	10.00	0.28
360	187.5	33.09777662	-103.57470212	13.40	-0.06	10.90	0.25
361	188.0	33.09778242	-103.57469945	9.49	-0.02	9.96	0.27
362	188.5	33.09778843	-103.57469704	10.63	-0.05	10.55	0.24
363	189.0	33.09779425	-103.57469441	10.23	-0.01	10.16	0.28
364	189.6	33.09779998	-103.57469168	12.34	-0.04	10.74	0.23
365	190.1	33.09780605	-103.57468948	10.00	0.00	9.96	0.28
366	190.6	33.09781225	-103.57468742	12.19	-0.03	9.96	0.24
367	191.1	33.09781885	-103.57468589	10.43	0.00	9.57	0.26
368	191.6	33.09782555	-103.57468444	10.94	-0.01	9.73	0.25
369	192.2	33.09783199	-103.57468284	10.39	0.01	9.49	0.28
370	192.7	33.09783843	-103.57468124	9.65	-0.02	9.61	0.27
371	193.2	33.09784442	-103.57467957	9.41	0.00	9.53	0.29
372	193.7	33.09785040	-103.57467789	10.82	-0.02	9.22	0.31

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
373	194.3	33.09785623	-103.57467615	11.91	-0.01	10.20	0.36
374	194.8	33.09786208	-103.57467431	11.21	0.01	10.00	0.34
375	195.3	33.09786774	-103.57467215	13.24	-0.03	11.21	0.35
376	195.8	33.09787346	-103.57467009	11.41	-0.01	10.86	0.35
377	196.3	33.09787886	-103.57466844	15.08	-0.06	12.34	0.33
378	196.9	33.09788427	-103.57466680	13.52	-0.01	12.50	0.35
379	197.4	33.09788958	-103.57466520	19.38	-0.08	13.56	0.32
380	197.9	33.09789473	-103.57466359	16.99	-0.01	14.41	0.35
381	198.4	33.09789966	-103.57466196	18.48	-0.06	16.68	0.35
382	199.0	33.09790476	-103.57466027	20.63	-0.04	17.93	0.35
383	199.5	33.09790999	-103.57465853	21.09	-0.05	20.31	0.31
384	200.0	33.09791504	-103.57465640	23.67	-0.07	21.48	0.31
385	200.5	33.09791997	-103.57465403	24.10	-0.06	23.44	0.34
386	201.0	33.09792487	-103.57465192	27.31	-0.10	25.90	0.30
387	201.6	33.09792979	-103.57464991	25.78	-0.05	26.29	0.33
388	202.1	33.09793454	-103.57464781	26.37	-0.09	26.56	0.28
389	202.6	33.09793924	-103.57464569	25.86	-0.05	27.27	0.32
390	203.1	33.09794409	-103.57464360	26.72	-0.05	26.95	0.31
391	203.7	33.09794897	-103.57464150	30.59	-0.10	29.34	0.29
392	204.2	33.09795368	-103.57463968	27.31	-0.03	28.56	0.35
393	204.7	33.09795839	-103.57463790	29.14	-0.10	28.71	0.26
394	205.2	33.09796366	-103.57463636	27.85	-0.04	30.39	0.32
395	205.8	33.09796889	-103.57463480	29.34	-0.07	30.35	0.29
396	206.3	33.09797380	-103.57463317	30.74	-0.05	31.88	0.34
397	206.8	33.09797876	-103.57463157	28.13	-0.04	31.29	0.34
398	207.3	33.09798398	-103.57463010	29.22	-0.09	31.21	0.30
399	207.8	33.09798931	-103.57462857	27.38	-0.05	31.21	0.34
400	208.4	33.09799487	-103.57462692	29.26	-0.09	31.37	0.28
401	208.9	33.09800032	-103.57462542	28.09	-0.04	31.45	0.31
402	209.4	33.09800558	-103.57462416	28.13	-0.05	32.31	0.31
403	209.9	33.09801095	-103.57462269	29.69	-0.06	32.38	0.30
404	210.5	33.09801644	-103.57462098	27.85	-0.03	32.34	0.34
405	211.0	33.09802175	-103.57461936	31.02	-0.11	30.31	0.27
406	211.5	33.09802695	-103.57461779	26.56	-0.03	28.16	0.32
407	212.0	33.09803219	-103.57461659	27.34	-0.07	27.34	0.33
408	212.5	33.09803745	-103.57461559	24.18	-0.03	25.74	0.35
409	213.1	33.09804244	-103.57461492	21.48	-0.03	24.81	0.35
410	213.6	33.09804730	-103.57461438	23.52	-0.08	24.49	0.31
411	214.1	33.09805160	-103.57461286	20.16	-0.04	23.05	0.33
412	214.6	33.09805576	-103.57461111	21.09	-0.09	22.23	0.29
413	215.1	33.09805914	-103.57460938	20.51	-0.08	22.15	0.34
414	215.7	33.09806241	-103.57460764	19.84	-0.07	20.94	0.39
415	216.2	33.09806591	-103.57460606	21.56	-0.11	21.33	0.32
416	216.7	33.09806942	-103.57460449	21.48	-0.10	21.37	0.33
417	217.2	33.09807308	-103.57460313	19.49	-0.07	20.00	0.33
418	217.8	33.09807665	-103.57460182	20.59	-0.09	20.90	0.33
419	218.3	33.09807975	-103.57460076	21.17	-0.09	21.84	0.34
420	218.8	33.09808297	-103.57459974	20.04	-0.05	21.21	0.33
421	219.3	33.09808664	-103.57459878	21.09	-0.09	21.37	0.33
422	219.8	33.09809026	-103.57459766	22.23	-0.09	21.25	0.34
423	220.4	33.09809379	-103.57459618	20.31	-0.05	20.39	0.34
424	220.9	33.09809716	-103.57459471	19.77	-0.06	19.53	0.35
425	221.4	33.09810028	-103.57459326	21.37	-0.10	19.69	0.34
426	221.9	33.09810352	-103.57459233	19.53	-0.06	19.45	0.36
427	222.5	33.09810685	-103.57459196	19.38	-0.09	19.57	0.33
428	223.0	33.09811003	-103.57459073	20.39	-0.09	20.66	0.35
429	223.5	33.09811309	-103.57458885	19.34	-0.06	19.57	0.37
430	224.0	33.09811677	-103.57458721	19.53	-0.07	20.43	0.36
431	224.6	33.09812077	-103.57458569	23.05	-0.11	21.21	0.34
432	225.1	33.09812498	-103.57458416	20.39	-0.05	20.08	0.36
433	225.6	33.09812926	-103.57458261	22.66	-0.10	20.08	0.28
434	226.1	33.09813362	-103.57458016	22.03	-0.07	20.39	0.31

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
435	226.6	33.09813803	-103.57457750	21.25	-0.05	21.09	0.35
436	227.2	33.09814265	-103.57457518	26.09	-0.13	21.41	0.29
437	227.7	33.09814730	-103.57457287	20.12	-0.04	20.98	0.31
438	228.2	33.09815233	-103.57457115	20.94	-0.10	20.51	0.30
439	228.7	33.09815736	-103.57456943	18.91	-0.07	20.23	0.30
440	229.3	33.09816228	-103.57456768	17.62	-0.06	20.08	0.30
441	229.8	33.09816728	-103.57456573	19.49	-0.08	19.57	0.28
442	230.3	33.09817209	-103.57456315	18.13	-0.06	18.75	0.30
443	230.8	33.09817700	-103.57456041	20.82	-0.11	19.53	0.27
444	231.3	33.09818185	-103.57455738	19.06	-0.06	18.87	0.32
445	231.9	33.09818677	-103.57455457	21.45	-0.10	19.57	0.31
446	232.4	33.09819182	-103.57455220	20.23	-0.06	19.96	0.33
447	232.9	33.09819705	-103.57454999	21.17	-0.05	20.00	0.33
448	233.4	33.09820255	-103.57454799	21.52	-0.06	19.81	0.34
449	233.9	33.09820818	-103.57454572	18.95	-0.03	19.81	0.38
450	234.5	33.09821397	-103.57454317	21.76	-0.10	19.53	0.31
451	235.0	33.09821956	-103.57454069	18.24	-0.05	18.40	0.33
452	235.5	33.09822503	-103.57453826	21.29	-0.10	18.59	0.32
453	236.0	33.09823064	-103.57453615	16.99	-0.02	16.88	0.35
454	236.6	33.09823632	-103.57453421	17.93	-0.07	17.58	0.32
455	237.1	33.09824188	-103.57453195	16.25	-0.05	16.68	0.34
456	237.6	33.09824741	-103.57452959	16.37	-0.05	16.72	0.36
457	238.1	33.09825265	-103.57452690	17.38	-0.08	16.33	0.34
458	238.6	33.09825783	-103.57452416	15.51	-0.05	15.51	0.37
459	239.2	33.09826305	-103.57452133	19.88	-0.11	16.48	0.30
460	239.7	33.09826829	-103.57451850	16.80	-0.03	16.33	0.35
461	240.2	33.09827356	-103.57451593	18.98	-0.09	16.21	0.34
462	240.7	33.09827889	-103.57451340	17.42	-0.04	17.31	0.35
463	241.3	33.09828473	-103.57451111	19.81	-0.08	17.34	0.35
464	241.8	33.09829049	-103.57450898	19.06	-0.04	18.13	0.34
465	242.3	33.09829587	-103.57450755	16.41	-0.02	17.50	0.35
466	242.8	33.09830128	-103.57450589	18.63	-0.06	18.05	0.33
467	243.3	33.09830682	-103.57450364	16.48	-0.03	17.54	0.36
468	243.9	33.09831232	-103.57450127	20.08	-0.07	18.20	0.30
469	244.4	33.09831778	-103.57449871	17.54	-0.02	19.06	0.35
470	244.9	33.09832309	-103.57449606	20.70	-0.09	19.38	0.28
471	245.4	33.09832824	-103.57449329	19.45	-0.02	20.23	0.33
472	246.0	33.09833352	-103.57449078	22.23	-0.05	21.09	0.36
473	246.5	33.09833893	-103.57448850	19.41	0.00	21.02	0.35
474	247.0	33.09834392	-103.57448591	19.73	-0.02	22.11	0.34
475	247.5	33.09834866	-103.57448312	20.66	-0.04	23.16	0.33
476	248.0	33.09835347	-103.57448023	19.77	-0.03	23.09	0.33
477	248.6	33.09835828	-103.57447730	22.81	-0.09	23.05	0.26
478	249.1	33.09836385	-103.57447464	20.31	-0.04	23.32	0.32
479	249.6	33.09836962	-103.57447205	20.86	-0.08	23.05	0.32
480	250.1	33.09837526	-103.57446939	20.47	-0.04	23.63	0.30
481	250.7	33.09838087	-103.57446673	21.17	-0.06	23.01	0.29
482	251.2	33.09838706	-103.57446400	21.80	-0.08	23.16	0.23
483	251.7	33.09839323	-103.57446127	18.67	-0.02	22.62	0.27
484	252.2	33.09839877	-103.57445853	21.45	-0.08	22.34	0.22
485	252.7	33.09840437	-103.57445586	20.39	-0.03	21.21	0.26
486	253.3	33.09841038	-103.57445366	24.18	-0.09	21.76	0.22
487	253.8	33.09841638	-103.57445178	20.70	-0.03	19.69	0.28
488	254.3	33.09842246	-103.57445109	21.37	-0.07	19.34	0.26
489	254.8	33.09842835	-103.57445103	19.88	-0.05	19.77	0.25
490	255.4	33.09843386	-103.57445254	19.81	-0.04	20.31	0.26
491	255.9	33.09843932	-103.57445476	22.31	-0.06	21.06	0.24
492	256.4	33.09844469	-103.57445814	22.11	-0.03	23.28	0.27
493	256.9	33.09845000	-103.57446184	25.74	-0.06	25.35	0.22
494	257.5	33.09845526	-103.57446592	25.23	-0.03	28.09	0.24
495	258.0	33.09846028	-103.57447019	30.90	-0.09	29.38	0.18
496	258.5	33.09846513	-103.57447463	26.52	-0.02	27.85	0.24

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
497	259.0	33.09846973	-103.57447934	26.52	-0.07	26.80	0.23
498	259.5	33.09847423	-103.57448424	24.65	-0.04	27.46	0.31
499	260.1	33.09847859	-103.57448941	24.81	-0.07	27.27	0.31
500	260.6	33.09848291	-103.57449467	24.22	-0.04	25.55	0.33
501	261.1	33.09848719	-103.57449995	24.02	-0.06	24.69	0.32
502	261.6	33.09849147	-103.57450524	25.23	-0.06	24.88	0.31
503	262.1	33.09849506	-103.57451111	23.83	-0.03	26.25	0.32
504	262.7	33.09849855	-103.57451704	28.09	-0.06	27.23	0.30
505	263.2	33.09850136	-103.57452323	25.12	-0.02	26.21	0.35
506	263.7	33.09850414	-103.57452946	30.98	-0.09	27.50	0.30
507	264.2	33.09850700	-103.57453610	26.25	-0.04	25.47	0.37
508	264.8	33.09850980	-103.57454278	28.87	-0.10	26.21	0.32
509	265.3	33.09851222	-103.57454946	23.71	-0.03	25.39	0.37
510	265.8	33.09851456	-103.57455610	25.98	-0.08	25.55	0.34
511	266.3	33.09851663	-103.57456255	23.63	-0.05	24.49	0.35
512	266.8	33.09851876	-103.57456917	23.20	-0.08	21.95	0.35
513	267.4	33.09852100	-103.57457611	23.79	-0.05	23.05	0.38
514	267.9	33.09852325	-103.57458305	21.37	-0.05	22.81	0.34
515	268.4	33.09852551	-103.57458995	22.34	-0.05	22.42	0.35
516	268.9	33.09852777	-103.57459677	21.52	-0.04	21.84	0.38
517	269.5	33.09853004	-103.57460350	25.04	-0.07	22.73	0.37
518	270.0	33.09853218	-103.57461025	23.32	-0.03	22.66	0.38
519	270.5	33.09853420	-103.57461696	27.31	-0.08	24.30	0.32
520	271.0	33.09853578	-103.57462329	23.98	-0.04	23.40	0.37
521	271.5	33.09853714	-103.57462942	26.88	-0.09	23.87	0.32
522	272.1	33.09853860	-103.57463623	25.08	-0.04	24.18	0.35
523	272.6	33.09854008	-103.57464327	25.51	-0.06	25.00	0.36
524	273.1	33.09854165	-103.57465043	23.75	-0.04	23.87	0.36
525	273.6	33.09854325	-103.57465764	22.58	-0.03	23.24	0.39
526	274.2	33.09854497	-103.57466441	24.81	-0.07	23.16	0.38
527	274.7	33.09854671	-103.57467113	21.60	-0.03	21.52	0.41
528	275.2	33.09854837	-103.57467765	23.24	-0.07	21.68	0.39
529	275.7	33.09855000	-103.57468418	20.31	-0.06	20.94	0.36
530	276.2	33.09855139	-103.57469070	23.13	-0.11	21.45	0.33
531	276.8	33.09855273	-103.57469734	22.58	-0.07	21.64	0.36
532	277.3	33.09855373	-103.57470386	22.85	-0.10	21.72	0.36
533	277.8	33.09855475	-103.57471033	23.44	-0.06	21.84	0.40
534	278.3	33.09855582	-103.57471637	24.65	-0.07	22.66	0.41
535	278.9	33.09855687	-103.57472246	27.70	-0.09	23.56	0.39
536	279.4	33.09855788	-103.57472874	24.92	-0.03	23.36	0.43
537	279.9	33.09855885	-103.57473462	27.66	-0.11	23.75	0.36
538	280.4	33.09855977	-103.57473993	23.67	-0.05	22.50	0.41
539	280.9	33.09856061	-103.57474465	27.19	-0.11	22.77	0.37
540	281.5	33.09856139	-103.57474879	20.12	-0.01	24.53	0.36
541	282.0	33.09856146	-103.57475207	23.52	-0.03	24.10	0.36
542	282.5	33.09856105	-103.57475473	24.34	-0.06	23.24	0.36
543	283.0	33.09855974	-103.57475748	21.60	-0.01	21.56	0.39
544	283.6	33.09855801	-103.57476027	21.29	-0.04	21.84	0.36
545	284.1	33.09855673	-103.57476308	24.34	-0.08	21.45	0.30
546	284.6	33.09855560	-103.57476589	21.41	-0.02	21.95	0.31
547	285.1	33.09855228	-103.57476764	21.56	-0.06	22.70	0.32
548	285.6	33.09854858	-103.57476919	24.02	-0.06	22.93	0.34
549	286.2	33.09854421	-103.57476956	-10.27	-0.06	10.47	-0.92
550	286.7	33.09853980	-103.57476986	-101.64	-3.30	-1.21	-2.28
551	287.2	33.09853548	-103.57477078	0.16	-0.45	-9.06	-2.81
552	287.7	33.09853110	-103.57477164	17.31	-0.10	18.24	-0.13
553	288.3	33.09852604	-103.57477187	24.26	-0.12	21.84	0.17
554	288.8	33.09852101	-103.57477199	21.48	-0.04	22.15	0.26
555	289.3	33.09851610	-103.57477162	22.27	-0.05	23.05	0.31
556	289.8	33.09851104	-103.57477131	26.33	-0.11	24.61	0.30
557	290.3	33.09850570	-103.57477116	22.27	-0.04	22.46	0.32
558	290.9	33.09850027	-103.57477126	25.12	-0.08	23.13	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
559	291.4	33.09849470	-103.57477181	23.48	-0.01	24.02	0.38
560	291.9	33.09848927	-103.57477244	25.98	-0.05	25.47	0.38
561	292.4	33.09848399	-103.57477317	27.73	-0.06	27.07	0.39
562	293.0	33.09847848	-103.57477375	27.07	-0.03	27.58	0.37
563	293.5	33.09847276	-103.57477420	31.17	-0.09	29.10	0.31
564	294.0	33.09846749	-103.57477462	26.64	-0.03	27.93	0.31
565	294.5	33.09846251	-103.57477502	29.77	-0.10	28.09	0.28
566	295.0	33.09845712	-103.57477552	26.68	-0.07	26.64	0.31
567	295.6	33.09845156	-103.57477608	24.26	-0.05	27.54	0.37
568	296.1	33.09844617	-103.57477676	29.34	-0.13	27.97	0.34
569	296.6	33.09844082	-103.57477748	23.05	-0.05	26.17	0.36
570	297.1	33.09843546	-103.57477823	27.23	-0.12	26.41	0.29
571	297.7	33.09843009	-103.57477899	24.84	-0.04	25.16	0.34
572	298.2	33.09842433	-103.57477952	28.63	-0.09	27.07	0.35
573	298.7	33.09841856	-103.57478003	30.63	-0.09	27.62	0.35
574	299.2	33.09841323	-103.57478036	27.38	-0.05	28.36	0.38
575	299.7	33.09840784	-103.57478071	32.58	-0.11	29.41	0.34
576	300.3	33.09840212	-103.57478119	28.05	-0.06	28.20	0.33
577	300.8	33.09839643	-103.57478182	28.91	-0.11	28.91	0.26
578	301.3	33.09839088	-103.57478303	27.89	-0.07	29.69	0.28
579	301.8	33.09838534	-103.57478424	28.05	-0.06	30.31	0.30
580	302.4	33.09837985	-103.57478547	33.01	-0.09	31.91	0.31
581	302.9	33.09837428	-103.57478645	31.29	-0.05	34.14	0.35
582	303.4	33.09836864	-103.57478704	35.47	-0.11	34.65	0.29
583	303.9	33.09836306	-103.57478782	31.13	-0.04	34.41	0.31
584	304.4	33.09835756	-103.57478884	36.76	-0.12	35.59	0.24
585	305.0	33.09835197	-103.57478960	33.56	-0.02	36.64	0.27
586	305.5	33.09834628	-103.57479016	37.15	-0.09	38.36	0.31
587	306.0	33.09834068	-103.57479086	36.33	-0.05	39.84	0.33
588	306.5	33.09833513	-103.57479164	35.12	-0.04	39.84	0.34
589	307.1	33.09832977	-103.57479265	38.56	-0.10	41.06	0.31
590	307.6	33.09832448	-103.57479376	34.73	-0.05	40.63	0.33
591	308.1	33.09831945	-103.57479496	36.68	-0.10	40.70	0.29
592	308.6	33.09831450	-103.57479618	34.34	-0.05	40.82	0.31
593	309.1	33.09830928	-103.57479796	34.88	-0.08	42.19	0.28
594	309.7	33.09830404	-103.57479980	31.72	0.00	41.52	0.28
595	310.2	33.09829924	-103.57480174	35.90	-0.05	43.40	0.26
596	310.7	33.09829448	-103.57480359	37.58	-0.07	44.96	0.21
597	311.2	33.09828980	-103.57480396	35.98	-0.01	46.17	0.19
598	311.8	33.09828507	-103.57480433	41.21	-0.04	50.86	0.21
599	312.3	33.09828009	-103.57480469	46.91	-0.01	57.70	0.26
600	312.8	33.09827506	-103.57480523	55.66	-0.05	63.75	0.29
601	313.3	33.09826985	-103.57480642	62.23	-0.09	69.41	0.29
602	313.8	33.09826452	-103.57480753	66.02	-0.05	74.34	0.36
603	314.4	33.09825889	-103.57480848	72.50	-0.14	77.77	0.24
604	314.9	33.09825370	-103.57480930	65.90	-0.03	77.97	0.30
605	315.4	33.09824910	-103.57480994	66.68	-0.07	78.09	0.30
606	315.9	33.09824495	-103.57481060	65.74	-0.07	78.91	0.29
607	316.5	33.09824127	-103.57481129	63.32	-0.05	77.85	0.29
608	317.0	33.09823775	-103.57481237	64.61	-0.10	79.10	0.26
609	317.5	33.09823433	-103.57481375	65.66	-0.07	80.90	0.29
610	318.0	33.09823001	-103.57481513	65.74	-0.08	81.64	0.29
611	318.5	33.09822520	-103.57481651	71.13	-0.10	85.47	0.29
612	319.1	33.09822030	-103.57481768	71.60	-0.05	87.27	0.34
613	319.6	33.09821535	-103.57481878	74.38	-0.11	85.59	0.27
614	320.1	33.09821022	-103.57482017	74.06	-0.04	87.89	0.31
615	320.6	33.09820507	-103.57482162	73.98	-0.06	88.95	0.29
616	321.2	33.09820018	-103.57482298	73.98	-0.09	88.91	0.29
617	321.7	33.09819531	-103.57482433	70.04	-0.07	87.03	0.28
618	322.2	33.09818987	-103.57482575	72.34	-0.11	86.76	0.22
619	322.7	33.09818450	-103.57482714	71.68	-0.06	87.07	0.28
620	323.2	33.09818002	-103.57482814	67.70	-0.08	83.56	0.25

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
621	323.8	33.09817548	-103.57482916	66.68	-0.11	82.42	0.22
622	324.3	33.09817057	-103.57483029	65.43	-0.04	82.46	0.26
623	324.8	33.09816570	-103.57483144	69.96	-0.12	84.65	0.24
624	325.3	33.09816094	-103.57483267	66.91	-0.07	82.81	0.31
625	325.9	33.09815606	-103.57483388	66.95	-0.10	78.91	0.31
626	326.4	33.09815094	-103.57483506	66.52	-0.10	78.52	0.29
627	326.9	33.09814577	-103.57483644	61.37	-0.05	75.20	0.35
628	327.4	33.09814054	-103.57483808	62.66	-0.11	72.11	0.26
629	327.9	33.09813543	-103.57483922	58.59	-0.05	70.35	0.33
630	328.5	33.09813048	-103.57483984	55.90	-0.10	65.98	0.27
631	329.0	33.09812520	-103.57484059	56.72	-0.08	66.21	0.30
632	329.5	33.09811971	-103.57484141	52.27	-0.06	65.08	0.31
633	330.0	33.09811417	-103.57484208	49.10	-0.08	60.47	0.21
634	330.6	33.09810864	-103.57484267	46.41	-0.04	58.91	0.23
635	331.1	33.09810332	-103.57484348	45.43	-0.07	57.46	0.17
636	331.6	33.09809805	-103.57484437	42.81	-0.01	55.86	0.23
637	332.1	33.09809279	-103.57484513	44.77	-0.06	56.02	0.19
638	332.6	33.09808753	-103.57484587	43.71	-0.05	55.90	0.22
639	333.2	33.09808270	-103.57484641	38.79	-0.04	51.64	0.22
640	333.7	33.09807787	-103.57484693	36.76	-0.08	46.84	0.17
641	334.2	33.09807229	-103.57484766	32.54	-0.02	43.44	0.19
642	334.7	33.09806669	-103.57484838	31.88	-0.04	41.06	0.19
643	335.3	33.09806116	-103.57484891	31.17	-0.05	38.20	0.19
644	335.8	33.09805560	-103.57484943	27.58	-0.03	34.30	0.19
645	336.3	33.09804995	-103.57484990	25.98	-0.04	29.65	0.16
646	336.8	33.09804432	-103.57485028	22.07	0.00	27.50	0.22
647	337.3	33.09803882	-103.57485043	23.87	-0.06	26.80	0.23
648	337.9	33.09803333	-103.57485068	23.56	-0.04	25.16	0.28
649	338.4	33.09802786	-103.57485112	22.42	-0.02	24.22	0.35
650	338.9	33.09802258	-103.57485157	29.81	-0.15	23.87	0.24
651	339.4	33.09801758	-103.57485202	21.60	-0.04	21.02	0.30
652	340.0	33.09801258	-103.57485182	21.99	-0.11	19.73	0.26
653	340.5	33.09800761	-103.57485103	18.48	-0.08	18.28	0.29
654	341.0	33.09800224	-103.57485054	16.13	-0.05	17.85	0.34
655	341.5	33.09799663	-103.57485025	22.66	-0.12	19.34	0.30
656	342.0	33.09799102	-103.57485016	16.91	-0.04	17.11	0.34
657	342.6	33.09798543	-103.57485016	18.95	-0.10	16.80	0.32
658	343.1	33.09797958	-103.57484998	16.33	-0.04	17.15	0.33
659	343.6	33.09797363	-103.57484975	18.71	-0.09	16.76	0.28
660	344.1	33.09796804	-103.57484997	17.07	-0.05	17.11	0.28
661	344.7	33.09796250	-103.57485026	17.97	-0.06	17.50	0.31
662	345.2	33.09795696	-103.57485093	23.75	-0.10	19.10	0.31
663	345.7	33.09795137	-103.57485163	21.09	-0.06	19.77	0.37
664	346.2	33.09794525	-103.57485223	25.27	-0.13	20.63	0.31
665	346.7	33.09793913	-103.57485287	21.95	-0.07	20.47	0.35
666	347.3	33.09793293	-103.57485372	25.08	-0.13	21.37	0.30
667	347.8	33.09792689	-103.57485449	22.62	-0.07	21.99	0.34
668	348.3	33.09792149	-103.57485490	23.52	-0.11	21.72	0.33
669	348.8	33.09791625	-103.57485535	22.77	-0.09	23.52	0.34
670	349.4	33.09791133	-103.57485590	21.17	-0.07	21.64	0.36
671	349.9	33.09790629	-103.57485642	23.28	-0.11	20.47	0.40
672	350.4	33.09790098	-103.57485689	18.98	-0.05	19.18	0.40
673	350.9	33.09789575	-103.57485746	21.88	-0.11	19.06	0.27
674	351.4	33.09789055	-103.57485815	17.58	-0.06	18.71	0.32
675	352.0	33.09788517	-103.57485866	18.05	-0.08	19.41	0.31
676	352.5	33.09787964	-103.57485903	21.09	-0.07	20.27	0.33
677	353.0	33.09787395	-103.57485884	21.52	-0.06	19.84	0.34
678	353.5	33.09786816	-103.57485832	24.34	-0.09	21.09	0.32
679	354.1	33.09786253	-103.57485798	22.34	-0.06	21.72	0.32
680	354.6	33.09785694	-103.57485771	25.20	-0.11	20.20	0.27
681	355.1	33.09785118	-103.57485792	18.75	-0.01	18.59	0.38
682	355.6	33.09784536	-103.57485825	18.40	-0.06	15.04	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
683	356.1	33.09783963	-103.57485907	15.47	-0.05	13.56	0.38
684	356.7	33.09783390	-103.57485995	12.38	-0.01	11.99	0.40
685	357.2	33.09782765	-103.57486037	15.78	-0.04	12.15	0.39
686	357.7	33.09782143	-103.57486074	10.78	0.02	10.23	0.40
687	358.2	33.09781572	-103.57486088	13.24	-0.04	10.20	0.32
688	358.8	33.09780994	-103.57486105	10.00	0.01	9.34	0.33
689	359.3	33.09780378	-103.57486138	12.19	-0.02	9.77	0.30
690	359.8	33.09779766	-103.57486170	11.21	0.02	9.49	0.31
691	360.3	33.09779170	-103.57486198	11.68	0.00	9.41	0.29
692	360.8	33.09778583	-103.57486225	14.10	0.01	10.08	0.29
693	361.4	33.09778016	-103.57486254	11.21	0.02	9.77	0.33
694	361.9	33.09777447	-103.57486288	12.62	-0.02	10.31	0.29
695	362.4	33.09776879	-103.57486332	10.00	0.02	9.38	0.31
696	362.9	33.09776288	-103.57486388	13.83	-0.03	10.27	0.26
697	363.5	33.09775671	-103.57486457	9.61	0.04	9.34	0.30
698	364.0	33.09775208	-103.57486706	8.83	0.03	8.98	0.28
699	364.5	33.09774862	-103.57487092	8.75	0.04	9.06	0.30
700	365.0	33.09774630	-103.57487609	10.00	0.01	9.30	0.30
701	365.5	33.09774460	-103.57488196	10.55	0.01	8.36	0.30
702	366.1	33.09774456	-103.57488873	9.57	0.01	8.56	0.25
703	366.6	33.09774512	-103.57489580	13.36	-0.02	10.20	0.19
704	367.1	33.09774665	-103.57490199	9.73	0.03	9.84	0.23
705	367.6	33.09774839	-103.57490798	11.41	0.00	10.20	0.25
706	368.2	33.09775252	-103.57491266	10.08	0.04	9.06	0.29
707	368.7	33.09775690	-103.57491718	14.92	-0.02	9.22	0.28
708	369.2	33.09776249	-103.57491915	14.06	0.01	9.81	0.30
709	369.7	33.09776814	-103.57492102	14.61	-0.03	9.65	0.30
710	370.2	33.09777411	-103.57492246	14.69	-0.02	10.20	0.30
711	370.8	33.09778019	-103.57492380	11.88	-0.01	10.47	0.32
712	371.3	33.09778649	-103.57492460	14.14	-0.04	10.16	0.29
713	371.8	33.09779278	-103.57492527	10.86	0.00	9.38	0.32
714	372.3	33.09779894	-103.57492552	12.42	-0.04	9.57	0.31
715	372.9	33.09780507	-103.57492571	10.20	0.00	9.30	0.34
716	373.4	33.09781112	-103.57492577	17.73	-0.08	11.76	0.28
717	373.9	33.09781723	-103.57492602	11.80	0.00	9.92	0.37
718	374.4	33.09782338	-103.57492654	15.16	-0.06	10.31	0.30
719	374.9	33.09782964	-103.57492713	11.72	0.02	9.96	0.34
720	375.5	33.09783596	-103.57492779	15.16	-0.04	11.29	0.35
721	376.0	33.09784205	-103.57492830	12.38	-0.02	10.16	0.34
722	376.5	33.09784797	-103.57492870	15.39	-0.05	10.63	0.30
723	377.0	33.09785391	-103.57492905	13.09	0.01	12.07	0.39
724	377.6	33.09785986	-103.57492938	16.56	-0.06	12.38	0.37
725	378.1	33.09786578	-103.57492979	16.84	-0.03	13.20	0.40
726	378.6	33.09787169	-103.57493024	20.59	-0.10	14.22	0.40
727	379.1	33.09787769	-103.57493138	21.02	-0.05	15.51	0.45
728	379.6	33.09788371	-103.57493265	22.70	-0.06	16.60	0.48
729	380.2	33.09788993	-103.57493400	23.98	-0.02	19.45	0.52
730	380.7	33.09789617	-103.57493535	24.65	-0.03	20.86	0.51
731	381.2	33.09790257	-103.57493578	28.24	-0.05	20.20	0.45
732	381.7	33.09790896	-103.57493611	28.05	-0.03	19.73	0.45
733	382.3	33.09791524	-103.57493555	33.36	-0.05	19.30	0.43
734	382.8	33.09792154	-103.57493500	34.73	-0.05	19.30	0.44
735	383.3	33.09792783	-103.57493445	41.37	-0.10	21.25	0.36
736	383.8	33.09793412	-103.57493380	36.25	-0.03	20.51	0.39
737	384.3	33.09794034	-103.57493283	42.19	-0.08	21.48	0.35
738	384.9	33.09794653	-103.57493179	42.23	-0.02	21.56	0.42
739	385.4	33.09795270	-103.57493061	51.72	-0.10	26.33	0.34
740	385.9	33.09795878	-103.57492957	50.63	-0.05	27.34	0.37
741	386.4	33.09796482	-103.57492868	58.98	-0.14	32.46	0.28
742	387.0	33.09797082	-103.57492792	59.49	-0.05	34.30	0.34
743	387.5	33.09797683	-103.57492727	67.85	-0.14	33.40	0.31
744	388.0	33.09798292	-103.57492663	66.52	-0.06	36.17	0.33

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
745	388.5	33.09798906	-103.57492599	64.81	-0.12	36.80	0.21
746	389.0	33.09799523	-103.57492526	56.88	-0.05	35.39	0.31
747	389.6	33.09800142	-103.57492451	66.60	-0.10	34.92	0.24
748	390.1	33.09800753	-103.57492358	70.23	-0.05	37.50	0.32
749	390.6	33.09801363	-103.57492260	66.76	-0.08	40.08	0.28
750	391.1	33.09801991	-103.57492177	69.18	-0.05	42.77	0.29
751	391.7	33.09802620	-103.57492096	81.95	-0.08	43.32	0.29
752	392.2	33.09803262	-103.57491952	87.66	-0.05	54.22	0.32
753	392.7	33.09803904	-103.57491806	82.66	-0.06	59.30	0.31
754	393.2	33.09804520	-103.57491687	77.66	-0.06	73.40	0.30
755	393.7	33.09805137	-103.57491571	68.48	-0.08	69.49	0.33
756	394.3	33.09805748	-103.57491481	62.93	-0.07	61.72	0.31
757	394.8	33.09806361	-103.57491384	56.76	-0.05	56.76	0.32
758	395.3	33.09806979	-103.57491264	13.52	-1.19	43.36	-1.05
759	395.8	33.09807598	-103.57491139	40.51	-0.42	51.99	-0.16
760	396.4	33.09808205	-103.57491004	61.60	-0.19	56.56	-0.03
761	396.9	33.09808815	-103.57490866	62.03	-0.07	58.56	0.30
762	397.4	33.09809427	-103.57490724	69.61	-0.12	60.43	0.31
763	397.9	33.09810033	-103.57490580	65.55	-0.06	63.13	0.36
764	398.4	33.09810633	-103.57490433	71.88	-0.14	62.19	0.28
765	399.0	33.09811254	-103.57490306	68.67	-0.04	62.66	0.34
766	399.5	33.09811891	-103.57490195	70.39	-0.09	65.94	0.28
767	400.0	33.09812516	-103.57490091	65.86	-0.05	64.61	0.32
768	400.5	33.09813130	-103.57489993	69.22	-0.09	67.23	0.30
769	401.1	33.09813734	-103.57489886	68.56	-0.04	67.11	0.34
770	401.6	33.09814334	-103.57489777	70.43	-0.07	67.23	0.32
771	402.1	33.09814940	-103.57489651	69.26	-0.04	69.02	0.34
772	402.6	33.09815546	-103.57489520	74.65	-0.08	70.27	0.34
773	403.1	33.09816161	-103.57489427	78.98	-0.05	76.80	0.33
774	403.7	33.09816778	-103.57489339	76.02	-0.07	75.70	0.33
775	404.2	33.09817395	-103.57489207	82.93	-0.05	72.85	0.34
776	404.7	33.09818012	-103.57489072	85.23	-0.08	71.60	0.38
777	405.2	33.09818641	-103.57488928	85.12	-0.09	75.66	0.40
778	405.8	33.09819272	-103.57488795	79.02	-0.06	74.02	0.48
779	406.3	33.09819907	-103.57488731	76.64	-0.06	72.46	0.47
780	406.8	33.09820543	-103.57488653	70.12	-0.06	74.57	0.47
781	407.3	33.09821169	-103.57488525	74.22	-0.07	77.38	0.47
782	407.8	33.09821788	-103.57488399	73.20	-0.04	77.66	0.46
783	408.4	33.09822392	-103.57488276	80.27	-0.10	81.45	0.43
784	408.9	33.09823011	-103.57488160	75.39	-0.04	82.19	0.49
785	409.4	33.09823649	-103.57488059	76.41	-0.11	79.06	0.41
786	409.9	33.09824285	-103.57487940	64.45	-0.11	72.50	0.40
787	410.5	33.09824919	-103.57487805	55.20	-0.13	67.81	0.30
788	411.0	33.09825522	-103.57487625	48.67	-0.13	61.48	0.27
789	411.5	33.09826099	-103.57487411	51.06	-0.14	59.96	0.24
790	412.0	33.09826671	-103.57487249	52.11	-0.08	62.62	0.34
791	412.5	33.09827240	-103.57487117	57.50	-0.16	60.31	0.27
792	413.1	33.09827847	-103.57486979	51.29	-0.07	55.16	0.35
793	413.6	33.09828467	-103.57486840	61.68	-0.18	58.20	0.23
794	414.1	33.09829094	-103.57486711	56.09	-0.09	59.57	0.32
795	414.6	33.09829721	-103.57486585	62.34	-0.14	59.41	0.30
796	415.2	33.09830355	-103.57486464	59.57	-0.09	59.57	0.35
797	415.7	33.09830990	-103.57486344	63.52	-0.11	61.60	0.32
798	416.2	33.09831623	-103.57486172	67.46	-0.08	66.91	0.32
799	416.7	33.09832255	-103.57485997	70.74	-0.10	70.90	0.30
800	417.2	33.09832880	-103.57485805	76.84	-0.09	71.80	0.32
801	417.8	33.09833503	-103.57485615	83.28	-0.13	81.72	0.33
802	418.3	33.09834118	-103.57485434	91.99	-0.11	89.57	0.35
803	418.8	33.09834740	-103.57485259	103.71	-0.14	99.18	0.37
804	419.3	33.09835387	-103.57485099	134.61	-0.09	120.08	0.46
805	419.9	33.09836032	-103.57484937	157.50	-0.14	144.34	0.45
806	420.4	33.09836678	-103.57484770	172.77	-0.08	166.09	0.47

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
807	420.9	33.09837309	-103.57484607	177.73	-0.11	170.43	0.42
808	421.4	33.09837922	-103.57484449	172.07	-0.10	172.85	0.45
809	421.9	33.09838550	-103.57484308	163.28	-0.10	171.68	0.44
810	422.5	33.09839197	-103.57484184	162.31	-0.08	164.45	0.46
811	423.0	33.09839834	-103.57484067	164.14	-0.13	164.96	0.41
812	423.5	33.09840467	-103.57483955	152.15	-0.08	162.58	0.36
813	424.0	33.09841082	-103.57483858	138.36	-0.10	142.46	0.32
814	424.6	33.09841689	-103.57483768	135.20	-0.10	137.15	0.30
815	425.1	33.09842359	-103.57483728	124.69	-0.09	131.72	0.31
816	425.6	33.09843050	-103.57483704	118.40	-0.08	114.53	0.37
817	426.1	33.09843695	-103.57483606	116.45	-0.06	104.81	0.41
818	426.6	33.09844334	-103.57483495	121.17	-0.09	108.28	0.41
819	427.2	33.09844968	-103.57483416	120.08	-0.05	103.79	0.45
820	427.7	33.09845603	-103.57483342	122.58	-0.11	100.16	0.46
821	428.2	33.09846231	-103.57483353	110.86	-0.05	97.15	0.45
822	428.7	33.09846860	-103.57483359	103.16	-0.10	94.34	0.40
823	429.3	33.09847487	-103.57483323	91.02	-0.06	86.33	0.42
824	429.8	33.09848118	-103.57483286	98.87	-0.19	78.95	0.25
825	430.3	33.09848760	-103.57483244	28.16	0.08	44.41	0.64
826	430.8	33.09849411	-103.57483199	78.13	-0.12	61.72	0.37
827	431.3	33.09850077	-103.57483143	85.35	-0.06	65.16	0.42
828	431.9	33.09850736	-103.57483115	90.12	-0.13	70.63	0.39
829	432.4	33.09851381	-103.57483139	74.88	-0.05	61.72	0.40
830	432.9	33.09852030	-103.57483140	69.88	-0.11	58.05	0.34
831	433.4	33.09852684	-103.57483111	62.73	-0.07	54.81	0.37
832	434.0	33.09853328	-103.57483074	64.41	-0.12	57.70	0.32
833	434.5	33.09853958	-103.57483031	57.15	-0.06	56.72	0.40
834	435.0	33.09854605	-103.57482986	59.38	-0.11	57.54	0.35
835	435.5	33.09855263	-103.57482939	60.35	-0.06	61.06	0.36
836	436.0	33.09855883	-103.57482867	65.47	-0.10	60.00	0.33
837	436.6	33.09856488	-103.57482783	66.21	-0.09	57.19	0.34
838	437.1	33.09857110	-103.57482738	66.33	-0.12	50.98	0.28
839	437.6	33.09857739	-103.57482704	63.13	-0.10	51.25	0.24
840	438.1	33.09858369	-103.57482681	56.80	-0.12	53.63	0.23
841	438.7	33.09858996	-103.57482659	50.66	-0.10	51.29	0.24
842	439.2	33.09859625	-103.57482621	44.88	-0.11	44.92	0.24
843	439.7	33.09860253	-103.57482583	43.87	-0.09	40.74	0.22
844	440.2	33.09860870	-103.57482576	36.84	-0.09	35.55	0.20
845	440.7	33.09861482	-103.57482572	33.28	-0.08	31.76	0.22
846	441.3	33.09862075	-103.57482587	29.45	-0.08	29.84	0.25
847	441.8	33.09862673	-103.57482592	28.20	-0.08	29.49	0.24
848	442.3	33.09863239	-103.57482560	25.63	-0.08	28.52	0.24
849	442.8	33.09863821	-103.57482530	28.52	-0.12	26.52	0.22
850	443.4	33.09864389	-103.57482506	22.50	-0.07	23.95	0.25
851	443.9	33.09864952	-103.57482480	26.37	-0.11	24.41	0.25
852	444.4	33.09865493	-103.57482450	21.25	-0.06	22.03	0.29
853	444.9	33.09866035	-103.57482430	27.93	-0.16	22.46	0.20
854	445.4	33.09866576	-103.57482420	21.41	-0.07	21.29	0.26
855	446.0	33.09867077	-103.57482470	24.02	-0.12	20.98	0.21
856	446.5	33.09867545	-103.57482571	22.07	-0.06	19.81	0.27
857	447.0	33.09867938	-103.57482888	20.55	-0.10	20.90	0.25
858	447.5	33.09868285	-103.57483332	20.51	-0.09	21.80	0.27
859	448.1	33.09868450	-103.57483903	18.95	-0.08	21.37	0.28
860	448.6	33.09868543	-103.57484526	19.61	-0.08	20.82	0.29
861	449.1	33.09868436	-103.57485191	21.56	-0.06	23.01	0.30
862	449.6	33.09868279	-103.57485866	25.23	-0.06	25.86	0.30
863	450.1	33.09867933	-103.57486432	22.58	-0.03	25.78	0.34
864	450.7	33.09867562	-103.57486985	22.66	-0.04	25.23	0.28
865	451.2	33.09867099	-103.57487298	23.40	-0.04	26.72	0.30
866	451.7	33.09866630	-103.57487594	29.69	-0.10	30.98	0.31
867	452.2	33.09866117	-103.57487769	32.93	-0.05	33.13	0.35
868	452.8	33.09865616	-103.57487938	35.20	-0.07	36.80	0.32

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
869	453.3	33.09865185	-103.57488077	41.25	-0.10	41.68	0.32
870	453.8	33.09864746	-103.57488209	39.92	-0.06	43.32	0.27
871	454.3	33.09864279	-103.57488314	42.77	-0.09	48.95	0.26
872	454.8	33.09863806	-103.57488408	51.88	-0.06	58.28	0.35
873	455.4	33.09863319	-103.57488474	58.01	-0.06	63.52	0.34
874	455.9	33.09862801	-103.57488557	65.39	-0.08	70.31	0.31
875	456.4	33.09862233	-103.57488663	72.93	-0.04	74.02	0.38
876	456.9	33.09861678	-103.57488759	85.47	-0.09	83.28	0.35
877	457.5	33.09861137	-103.57488842	87.97	-0.06	94.18	0.37
878	458.0	33.09860576	-103.57488897	92.38	-0.09	97.85	0.35
879	458.5	33.09859997	-103.57488930	100.04	-0.06	103.16	0.39
880	459.0	33.09859423	-103.57488969	97.54	-0.03	104.30	0.43
881	459.5	33.09858852	-103.57489012	92.77	-0.09	100.90	0.36
882	460.1	33.09858320	-103.57489031	88.13	-0.05	95.59	0.37
883	460.6	33.09857801	-103.57489041	86.06	-0.11	93.16	0.28
884	461.1	33.09857261	-103.57489069	78.13	0.01	96.02	0.37
885	461.6	33.09856715	-103.57489101	81.88	-0.09	96.64	0.36
886	462.2	33.09856130	-103.57489114	83.13	-0.06	96.06	0.37
887	462.7	33.09855539	-103.57489125	85.74	-0.07	98.09	0.39
888	463.2	33.09854962	-103.57489153	89.49	-0.05	101.02	0.43
889	463.7	33.09854386	-103.57489180	91.09	-0.04	104.57	0.44
890	464.2	33.09853817	-103.57489195	98.87	-0.08	110.86	0.42
891	464.8	33.09853241	-103.57489212	104.10	-0.04	114.10	0.45
892	465.3	33.09852629	-103.57489242	117.77	-0.13	122.70	0.35
893	465.8	33.09852013	-103.57489264	130.12	-0.04	136.21	0.46
894	466.3	33.09851391	-103.57489262	138.40	-0.10	144.53	0.42
895	466.9	33.09850780	-103.57489270	143.59	-0.05	154.02	0.47
896	467.4	33.09850192	-103.57489300	147.89	-0.09	161.56	0.44
897	467.9	33.09849611	-103.57489315	143.71	-0.03	163.95	0.48
898	468.4	33.09849038	-103.57489311	137.15	-0.09	161.88	0.47
899	468.9	33.09848460	-103.57489325	134.57	-0.05	158.67	0.49
900	469.5	33.09847877	-103.57489357	137.38	-0.04	157.34	0.51
901	470.0	33.09847262	-103.57489375	140.82	-0.07	162.62	0.53
902	470.5	33.09846629	-103.57489384	143.01	-0.04	165.39	0.56
903	471.0	33.09846007	-103.57489412	158.32	-0.05	183.59	0.57
904	471.6	33.09845389	-103.57489450	158.67	0.01	187.31	0.61
905	472.1	33.09844790	-103.57489488	165.20	-0.07	185.35	0.58
906	472.6	33.09844199	-103.57489525	160.70	-0.03	183.44	0.60
907	473.1	33.09843709	-103.57489572	174.96	-0.04	199.73	0.65
908	473.6	33.09843240	-103.57489621	170.43	-0.02	199.18	0.66
909	474.2	33.09842740	-103.57489604	169.96	-0.05	194.14	0.57
910	474.7	33.09842239	-103.57489580	173.79	-0.03	199.34	0.59
911	475.2	33.09841668	-103.57489544	178.71	-0.09	202.54	0.55
912	475.7	33.09841088	-103.57489509	186.33	-0.06	199.65	0.56
913	476.3	33.09840426	-103.57489493	175.86	-0.09	201.80	0.48
914	476.8	33.09839779	-103.57489470	190.16	-0.05	209.22	0.53
915	477.3	33.09839235	-103.57489420	193.32	-0.03	218.95	0.58
916	477.8	33.09838680	-103.57489376	197.93	-0.07	222.62	0.56
917	478.3	33.09838109	-103.57489349	198.75	-0.03	227.81	0.60
918	478.9	33.09837607	-103.57489331	191.48	-0.08	227.97	0.55
919	479.4	33.09837239	-103.57489333	185.82	-0.06	227.23	0.55
920	479.9	33.09836852	-103.57489303	176.33	-0.07	218.63	0.49
921	480.4	33.09836440	-103.57489234	171.52	-0.08	212.46	0.45
922	481.0	33.09836137	-103.57489154	163.98	-0.04	207.50	0.48
923	481.5	33.09835938	-103.57489064	146.17	-0.03	192.81	0.49
924	482.0	33.09835819	-103.57488996	145.98	-0.03	189.81	0.50
925	482.5	33.09835752	-103.57488942	143.95	-0.04	186.25	0.48
926	483.0	33.09835491	-103.57488960	144.88	-0.07	181.76	0.42
927	483.6	33.09835141	-103.57489011	149.06	-0.06	181.45	0.47
928	484.1	33.09834699	-103.57488985	137.62	-0.06	175.98	0.42
929	484.6	33.09834231	-103.57488936	124.81	-0.05	167.23	0.40
930	485.1	33.09833750	-103.57488907	113.32	-0.08	156.02	0.37

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
931	485.7	33.09833266	-103.57488882	115.74	-0.07	151.68	0.40
932	486.2	33.09832719	-103.57488779	114.57	-0.07	150.35	0.38
933	486.7	33.09832164	-103.57488671	113.36	-0.10	143.79	0.34
934	487.2	33.09831540	-103.57488555	122.11	-0.08	140.70	0.36
935	487.7	33.09830918	-103.57488441	138.95	-0.10	137.46	0.38
936	488.3	33.09830303	-103.57488350	117.81	-0.09	116.25	0.33
937	488.8	33.09829687	-103.57488268	101.80	-0.14	101.06	0.23
938	489.3	33.09829071	-103.57488220	82.31	-0.09	76.45	0.28
939	489.8	33.09828456	-103.57488202	72.42	-0.11	75.66	0.23
940	490.4	33.09827856	-103.57488257	62.62	-0.08	72.81	0.28
941	490.9	33.09827247	-103.57488365	62.66	-0.11	66.95	0.26
942	491.4	33.09826627	-103.57488561	62.70	-0.09	63.91	0.27
943	491.9	33.09826026	-103.57488774	63.28	-0.10	65.82	0.26
944	492.4	33.09825447	-103.57489008	52.85	-0.34	63.05	-0.22
945	493.0	33.09824854	-103.57489219	56.29	-0.18	62.15	0.02
946	493.5	33.09824248	-103.57489410	55.66	-0.11	64.73	0.19
947	494.0	33.09823616	-103.57489588	54.88	-0.12	64.45	0.22
948	494.5	33.09822966	-103.57489759	54.18	-0.09	64.73	0.25
949	495.1	33.09822324	-103.57489939	53.20	-0.11	63.48	0.24
950	495.6	33.09821683	-103.57490122	55.47	-0.10	64.61	0.26
951	496.1	33.09821056	-103.57490284	55.35	-0.10	63.44	0.26
952	496.6	33.09820433	-103.57490442	57.31	-0.09	65.63	0.28
953	497.1	33.09819802	-103.57490611	53.28	-0.09	64.61	0.27
954	497.7	33.09819168	-103.57490782	55.00	-0.10	61.45	0.28
955	498.2	33.09818522	-103.57490969	51.41	-0.08	56.95	0.31
956	498.7	33.09817874	-103.57491158	50.55	-0.09	53.56	0.30
957	499.2	33.09817247	-103.57491372	40.94	-0.05	47.62	0.31
958	499.8	33.09816626	-103.57491593	40.70	-0.09	43.71	0.29
959	500.3	33.09816028	-103.57491854	35.66	-0.04	41.09	0.32
960	500.8	33.09815430	-103.57492118	38.01	-0.09	38.01	0.29
961	501.3	33.09814832	-103.57492394	30.90	-0.05	31.95	0.35
962	501.8	33.09814237	-103.57492642	32.42	-0.12	30.59	0.25
963	502.4	33.09813647	-103.57492831	23.79	-0.04	26.64	0.29
964	502.9	33.09813051	-103.57493044	26.02	-0.10	25.23	0.22
965	503.4	33.09812446	-103.57493296	20.82	-0.02	23.20	0.32
966	503.9	33.09811846	-103.57493539	23.83	-0.07	22.89	0.25
967	504.5	33.09811252	-103.57493770	21.29	-0.03	21.02	0.30
968	505.0	33.09810619	-103.57493994	24.57	-0.08	22.23	0.26
969	505.5	33.09809957	-103.57494211	21.72	-0.04	22.58	0.31
970	506.0	33.09809313	-103.57494459	23.98	-0.07	22.77	0.27
971	506.5	33.09808684	-103.57494722	20.70	-0.02	22.77	0.29
972	507.1	33.09808049	-103.57495020	24.57	-0.08	23.20	0.22
973	507.6	33.09807412	-103.57495330	20.55	-0.03	21.80	0.28
974	508.1	33.09806765	-103.57495618	21.72	-0.05	21.80	0.23
975	508.6	33.09806115	-103.57495900	19.18	-0.02	21.09	0.28
976	509.2	33.09805485	-103.57496202	23.20	-0.07	21.45	0.21
977	509.7	33.09804861	-103.57496505	19.38	-0.02	20.82	0.26
978	510.2	33.09804230	-103.57496794	20.59	-0.08	20.70	0.22
979	510.7	33.09803602	-103.57497078	17.66	-0.03	19.18	0.23
980	511.2	33.09802951	-103.57497333	19.26	-0.06	19.69	0.22
981	511.8	33.09802304	-103.57497590	16.99	-0.03	18.95	0.24
982	512.3	33.09801677	-103.57497865	20.47	-0.07	20.39	0.20
983	512.8	33.09801057	-103.57498136	18.56	-0.04	21.21	0.23
984	513.3	33.09800469	-103.57498393	20.70	-0.07	21.29	0.22
985	513.9	33.09799875	-103.57498632	20.98	-0.04	21.88	0.25
986	514.4	33.09799265	-103.57498835	24.10	-0.08	25.12	0.22
987	514.9	33.09798662	-103.57499030	28.44	-0.03	30.55	0.27
988	515.4	33.09798073	-103.57499212	36.21	-0.05	35.08	0.26
989	515.9	33.09797462	-103.57499398	56.60	-0.02	38.75	0.29
990	516.5	33.09796828	-103.57499587	65.78	-0.03	49.84	0.28
991	517.0	33.09796198	-103.57499772	77.77	-0.02	53.16	0.28
992	517.5	33.09795568	-103.57499956	83.01	-0.06	64.61	0.23

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
993	518.0	33.09794922	-103.57500138	86.45	-0.04	67.62	0.23
994	518.6	33.09794266	-103.57500321	88.48	-0.07	71.91	0.23
995	519.1	33.09793605	-103.57500482	86.02	-0.05	75.00	0.26
996	519.6	33.09792945	-103.57500635	84.65	-0.06	78.48	0.20
997	520.1	33.09792271	-103.57500814	90.23	-0.04	76.56	0.24
998	520.6	33.09791594	-103.57500997	98.20	-0.07	75.39	0.25
999	521.2	33.09790934	-103.57501219	104.02	-0.06	75.20	0.32
1000	521.7	33.09790275	-103.57501444	100.08	-0.10	69.30	0.25
1001	522.2	33.09789628	-103.57501675	86.91	-0.07	55.31	0.27
1002	522.7	33.09788987	-103.57501907	59.57	-0.11	42.77	0.24
1003	523.3	33.09788421	-103.57502156	39.06	-0.06	34.92	0.25
1004	523.8	33.09787843	-103.57502401	31.02	-0.10	33.36	0.22
1005	524.3	33.09787249	-103.57502618	25.66	-0.06	26.02	0.24
1006	524.8	33.09786641	-103.57502832	23.13	-0.10	21.99	0.24
1007	525.3	33.09786006	-103.57503037	21.37	-0.05	21.17	0.22
1008	525.9	33.09785379	-103.57503238	20.35	-0.09	18.48	0.23
1009	526.4	33.09784769	-103.57503432	17.97	-0.05	15.94	0.23
1010	526.9	33.09784165	-103.57503617	15.86	-0.05	14.92	0.23
1011	527.4	33.09783570	-103.57503787	15.35	-0.04	14.61	0.22
1012	528.0	33.09782982	-103.57503945	13.24	-0.02	13.59	0.22
1013	528.5	33.09782399	-103.57504089	17.38	-0.06	13.05	0.18
1014	529.0	33.09781790	-103.57504202	12.31	-0.02	12.58	0.18
1015	529.5	33.09781162	-103.57504294	13.71	-0.05	13.01	0.15
1016	530.0	33.09780544	-103.57504416	11.02	0.03	12.70	0.23
1017	530.6	33.09779927	-103.57504554	14.38	-0.01	12.85	0.23
1018	531.1	33.09779361	-103.57504835	11.64	0.00	12.66	0.24
1019	531.6	33.09778809	-103.57505162	17.11	-0.08	13.40	0.19
1020	532.1	33.09778456	-103.57505778	13.05	-0.03	12.31	0.27
1021	532.7	33.09778136	-103.57506446	17.97	-0.08	13.67	0.22
1022	533.2	33.09778226	-103.57507171	12.85	0.01	12.58	0.28
1023	533.7	33.09778351	-103.57507893	12.97	-0.01	12.54	0.25
1024	534.2	33.09778814	-103.57508379	12.03	0.00	11.84	0.26
1025	534.7	33.09779296	-103.57508833	15.08	-0.04	11.80	0.24
1026	535.3	33.09779926	-103.57509015	11.64	0.01	11.41	0.26
1027	535.8	33.09780575	-103.57509151	13.05	-0.05	12.81	0.23
1028	536.3	33.09781300	-103.57509091	11.41	-0.02	13.13	0.20
1029	536.8	33.09782005	-103.57509018	17.73	-0.09	13.32	0.18
1030	537.4	33.09782659	-103.57508909	15.47	-0.05	13.91	0.26
1031	537.9	33.09783321	-103.57508800	20.20	-0.10	15.78	0.27
1032	538.4	33.09783994	-103.57508691	20.08	-0.08	17.66	0.28
1033	538.9	33.09784675	-103.57508592	28.16	-0.14	21.52	0.26
1034	539.4	33.09785360	-103.57508506	29.02	-0.09	26.99	0.31
1035	540.0	33.09786046	-103.57508386	38.56	-0.12	33.63	0.28
1036	540.5	33.09786733	-103.57508237	39.53	-0.14	40.27	0.20
1037	541.0	33.09787402	-103.57508063	47.19	-0.15	47.23	0.21
1038	541.5	33.09788056	-103.57507873	44.34	-0.09	48.79	0.26
1039	542.1	33.09788703	-103.57507691	54.81	-0.14	58.24	0.25
1040	542.6	33.09789341	-103.57507513	59.14	-0.07	59.96	0.31
1041	543.1	33.09789993	-103.57507370	78.28	-0.10	53.63	0.25
1042	543.6	33.09790649	-103.57507237	87.93	-0.05	65.63	0.29
1043	544.1	33.09791319	-103.57507098	96.25	-0.07	76.41	0.25
1044	544.7	33.09791989	-103.57506959	96.48	-0.03	76.09	0.29
1045	545.2	33.09792651	-103.57506837	94.53	-0.05	73.36	0.27
1046	545.7	33.09793313	-103.57506715	87.31	-0.01	70.74	0.30
1047	546.2	33.09793983	-103.57506578	81.09	-0.05	61.21	0.27
1048	546.8	33.09794646	-103.57506440	58.13	0.01	52.66	0.31
1049	547.3	33.09795285	-103.57506296	45.59	-0.05	47.31	0.25
1050	547.8	33.09795924	-103.57506151	31.37	-0.02	38.28	0.27
1051	548.3	33.09796566	-103.57505999	31.48	-0.08	35.12	0.21
1052	548.8	33.09797207	-103.57505853	26.02	-0.04	32.70	0.26
1053	549.4	33.09797850	-103.57505722	28.01	-0.08	29.69	0.20
1054	549.9	33.09798506	-103.57505585	22.85	-0.04	27.11	0.22

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1055	550.4	33.09799187	-103.57505437	24.14	-0.08	25.78	0.18
1056	550.9	33.09799847	-103.57505281	20.39	-0.03	23.52	0.24
1057	551.5	33.09800481	-103.57505119	20.51	-0.07	21.02	0.18
1058	552.0	33.09801139	-103.57504966	16.13	-0.04	18.48	0.22
1059	552.5	33.09801818	-103.57504820	19.38	-0.09	18.59	0.16
1060	553.0	33.09802466	-103.57504668	14.88	-0.03	16.76	0.22
1061	553.5	33.09803100	-103.57504514	18.83	-0.10	17.03	0.19
1062	554.1	33.09803737	-103.57504391	15.70	-0.05	16.25	0.23
1063	554.6	33.09804377	-103.57504280	17.19	-0.09	15.27	0.20
1064	555.1	33.09805041	-103.57504127	15.20	-0.06	15.04	0.22
1065	555.6	33.09805710	-103.57503965	16.29	-0.09	14.65	0.19
1066	556.2	33.09806360	-103.57503818	15.82	-0.05	14.96	0.22
1067	556.7	33.09807009	-103.57503673	17.07	-0.09	15.16	0.21
1068	557.2	33.09807679	-103.57503542	16.72	-0.07	14.34	0.25
1069	557.7	33.09808346	-103.57503409	15.78	-0.10	14.61	0.22
1070	558.2	33.09808970	-103.57503263	15.86	-0.08	15.08	0.19
1071	558.8	33.09809597	-103.57503122	15.31	-0.08	14.73	0.17
1072	559.3	33.09810237	-103.57503014	15.70	-0.07	14.96	0.19
1073	559.8	33.09810874	-103.57502903	13.59	-0.05	15.23	0.20
1074	560.3	33.09811500	-103.57502785	17.03	-0.08	15.04	0.20
1075	560.9	33.09812131	-103.57502668	14.53	-0.05	14.81	0.20
1076	561.4	33.09812773	-103.57502553	19.30	-0.11	15.63	0.17
1077	561.9	33.09813413	-103.57502421	14.26	-0.05	15.35	0.21
1078	562.4	33.09814050	-103.57502266	19.14	-0.11	15.43	0.18
1079	562.9	33.09814698	-103.57502159	14.81	-0.05	15.47	0.24
1080	563.5	33.09815357	-103.57502100	18.24	-0.09	15.94	0.21
1081	564.0	33.09816004	-103.57502006	15.66	-0.05	15.63	0.23
1082	564.5	33.09816643	-103.57501885	21.80	-0.12	17.62	0.19
1083	565.0	33.09817239	-103.57501790	18.05	-0.07	17.77	0.25
1084	565.6	33.09817814	-103.57501707	23.05	-0.11	19.06	0.19
1085	566.1	33.09818433	-103.57501654	25.27	-0.07	20.08	0.26
1086	566.6	33.09819069	-103.57501610	36.99	-0.12	27.11	0.26
1087	567.1	33.09819643	-103.57501572	46.95	-0.08	35.90	0.36
1088	567.6	33.09820205	-103.57501537	60.70	-0.11	32.62	0.37
1089	568.2	33.09820787	-103.57501531	90.31	-0.06	49.77	0.44
1090	568.7	33.09821372	-103.57501528	81.45	-0.08	60.90	0.37
1091	569.2	33.09821926	-103.57501470	88.20	-0.07	66.37	0.37
1092	569.7	33.09822483	-103.57501413	85.74	-0.07	71.37	0.35
1093	570.3	33.09823056	-103.57501355	86.17	-0.08	59.14	0.36
1094	570.8	33.09823646	-103.57501318	70.16	-0.09	53.59	0.33
1095	571.3	33.09824254	-103.57501374	61.95	-0.08	60.98	0.34
1096	571.8	33.09824848	-103.57501403	46.02	-0.04	52.73	0.37
1097	572.3	33.09825385	-103.57501351	43.36	-0.10	48.16	0.31
1098	572.9	33.09825956	-103.57501293	38.01	-0.07	45.35	0.28
1099	573.4	33.09826593	-103.57501221	41.17	-0.13	43.63	0.22
1100	573.9	33.09827221	-103.57501150	36.21	-0.05	44.26	0.32
1101	574.4	33.09827838	-103.57501078	38.05	-0.13	43.83	0.29
1102	575.0	33.09828458	-103.57501011	34.34	-0.08	39.18	0.34
1103	575.5	33.09829081	-103.57500947	37.70	-0.15	38.56	0.30
1104	576.0	33.09829707	-103.57500907	33.67	-0.08	39.18	0.32
1105	576.5	33.09830334	-103.57500881	31.72	-0.10	39.81	0.32
1106	577.0	33.09830967	-103.57500849	31.95	-0.06	41.99	0.38
1107	577.6	33.09831601	-103.57500814	34.53	-0.08	44.61	0.33
1108	578.1	33.09832207	-103.57500747	40.20	-0.05	50.43	0.33
1109	578.6	33.09832801	-103.57500670	43.48	-0.10	56.02	0.30
1110	579.1	33.09833396	-103.57500621	45.00	-0.01	62.70	0.32
1111	579.7	33.09833990	-103.57500578	49.22	-0.08	69.92	0.32
1112	580.2	33.09834606	-103.57500513	58.98	-0.06	78.63	0.40
1113	580.7	33.09835225	-103.57500446	75.78	-0.05	85.55	0.46
1114	581.2	33.09835850	-103.57500319	102.42	-0.06	96.41	0.50
1115	581.7	33.09836475	-103.57500194	115.78	-0.03	114.14	0.56
1116	582.3	33.09837121	-103.57500089	126.13	-0.06	128.40	0.57

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1117	582.8	33.09837772	-103.57499995	121.60	-0.03	132.54	0.60
1118	583.3	33.09838419	-103.57499947	119.77	-0.06	130.43	0.58
1119	583.8	33.09839080	-103.57499903	108.98	-0.04	125.47	0.57
1120	584.4	33.09839716	-103.57499871	100.43	-0.06	120.31	0.56
1121	584.9	33.09840362	-103.57499837	97.62	-0.06	116.72	0.57
1122	585.4	33.09841000	-103.57499801	94.73	-0.03	112.77	0.57
1123	585.9	33.09841624	-103.57499758	87.77	-0.03	108.67	0.57
1124	586.4	33.09842232	-103.57499708	85.27	-0.04	108.44	0.58
1125	587.0	33.09842877	-103.57499657	84.49	-0.08	108.13	0.54
1126	587.5	33.09843553	-103.57499607	88.75	-0.08	109.61	0.50
1127	588.0	33.09844178	-103.57499569	87.58	-0.03	107.93	0.54
1128	588.5	33.09844772	-103.57499540	94.49	-0.06	103.16	0.56
1129	589.1	33.09845366	-103.57499513	95.08	-0.04	107.27	0.52
1130	589.6	33.09845962	-103.57499487	94.49	-0.07	105.59	0.50
1131	590.1	33.09846602	-103.57499465	90.78	-0.02	106.06	0.55
1132	590.6	33.09847256	-103.57499443	94.73	-0.01	108.09	0.50
1133	591.1	33.09847880	-103.57499435	96.25	0.01	106.13	0.53
1134	591.7	33.09848498	-103.57499429	99.02	-0.08	100.78	0.48
1135	592.2	33.09849123	-103.57499445	92.66	-0.05	98.91	0.48
1136	592.7	33.09849746	-103.57499465	88.05	-0.08	95.78	0.42
1137	593.2	33.09850330	-103.57499530	82.50	-0.04	93.32	0.45
1138	593.8	33.09850907	-103.57499600	73.09	-0.10	87.27	0.31
1139	594.3	33.09851430	-103.57499703	62.34	-0.03	80.66	0.34
1140	594.8	33.09851931	-103.57499789	62.97	-0.11	77.03	0.32
1141	595.3	33.09852351	-103.57499812	62.19	-0.09	75.47	0.34
1142	595.8	33.09852793	-103.57499858	56.99	-0.06	70.59	0.37
1143	596.4	33.09853281	-103.57499961	54.92	-0.11	65.98	0.32
1144	596.9	33.09853743	-103.57500064	50.08	-0.08	61.72	0.33
1145	597.4	33.09854163	-103.57500168	46.21	-0.07	58.05	0.35
1146	597.9	33.09854584	-103.57500274	45.66	-0.11	53.52	0.30
1147	598.5	33.09855003	-103.57500379	40.43	-0.03	49.06	0.32
1148	599.0	33.09855447	-103.57500494	37.85	-0.07	45.66	0.28
1149	599.5	33.09855911	-103.57500617	35.51	-0.03	43.67	0.33
1150	600.0	33.09856378	-103.57500740	33.87	-0.06	41.09	0.32
1151	600.5	33.09856849	-103.57500865	33.56	-0.09	39.06	0.25
1152	601.1	33.09857343	-103.57500968	31.21	-0.03	36.91	0.30
1153	601.6	33.09857847	-103.57501062	32.23	-0.06	35.70	0.32
1154	602.1	33.09858359	-103.57501142	31.99	-0.09	34.73	0.28
1155	602.6	33.09858874	-103.57501219	28.75	-0.06	31.95	0.28
1156	603.2	33.09859399	-103.57501276	28.87	-0.09	29.73	0.24
1157	603.7	33.09859926	-103.57501331	25.98	-0.05	27.97	0.28
1158	604.2	33.09860419	-103.57501428	25.04	-0.05	27.42	0.31
1159	604.7	33.09860916	-103.57501521	28.01	-0.12	28.16	0.31
1160	605.2	33.09861438	-103.57501539	24.61	-0.07	25.98	0.35
1161	605.8	33.09861956	-103.57501558	25.43	-0.10	25.39	0.34
1162	606.3	33.09862456	-103.57501583	23.83	-0.09	23.44	0.34
1163	606.8	33.09862963	-103.57501607	21.06	-0.07	22.97	0.35
1164	607.3	33.09863499	-103.57501626	23.59	-0.12	23.59	0.29
1165	607.9	33.09864025	-103.57501682	21.21	-0.07	22.42	0.32
1166	608.4	33.09864527	-103.57501815	21.56	-0.09	23.16	0.32
1167	608.9	33.09865012	-103.57501960	23.36	-0.10	23.67	0.32
1168	609.4	33.09865471	-103.57502121	20.78	-0.08	22.15	0.29
1169	609.9	33.09865935	-103.57502276	20.47	-0.10	21.52	0.24
1170	610.5	33.09866404	-103.57502423	19.02	-0.09	21.72	0.27
1171	611.0	33.09866850	-103.57502600	18.52	-0.10	21.80	0.25
1172	611.5	33.09867277	-103.57502798	18.20	-0.10	20.27	0.24
1173	612.0	33.09867525	-103.57503141	15.94	-0.10	18.56	0.28
1174	612.5	33.09867682	-103.57503559	17.66	-0.13	19.22	0.30
1175	613.1	33.09867560	-103.57503967	15.94	-0.09	16.84	0.34
1176	613.6	33.09867341	-103.57504369	16.56	-0.11	16.68	0.30
1177	614.1	33.09866909	-103.57504640	15.66	-0.05	16.29	0.35
1178	614.6	33.09866435	-103.57504882	15.39	-0.07	16.09	0.35

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1179	615.2	33.09865897	-103.57504984	15.31	-0.09	16.91	0.36
1180	615.7	33.09865353	-103.57505073	14.38	-0.11	16.06	0.28
1181	616.2	33.09864865	-103.57505239	18.48	-0.14	17.58	0.26
1182	616.7	33.09864378	-103.57505399	17.42	-0.08	18.32	0.32
1183	617.3	33.09863854	-103.57505453	17.23	-0.09	18.36	0.33
1184	617.8	33.09863320	-103.57505507	19.65	-0.10	18.79	0.32
1185	618.3	33.09862801	-103.57505553	19.30	-0.07	19.14	0.35
1186	618.8	33.09862268	-103.57505605	22.27	-0.14	17.70	0.29
1187	619.3	33.09861723	-103.57505674	15.63	-0.05	15.78	0.29
1188	619.9	33.09861161	-103.57505748	15.27	-0.07	16.13	0.25
1189	620.4	33.09860561	-103.57505831	16.02	-0.06	16.52	0.27
1190	620.9	33.09859965	-103.57505921	13.71	-0.04	15.39	0.30
1191	621.4	33.09859375	-103.57506022	16.37	-0.06	15.74	0.28
1192	621.9	33.09858782	-103.57506114	14.18	-0.02	15.31	0.36
1193	622.5	33.09858184	-103.57506199	23.48	-0.11	17.66	0.28
1194	623.0	33.09857633	-103.57506233	17.97	0.00	16.84	0.36
1195	623.5	33.09857119	-103.57506232	17.31	-0.08	17.38	0.30
1196	624.0	33.09856574	-103.57506307	16.76	-0.05	17.73	0.33
1197	624.6	33.09856016	-103.57506419	17.89	-0.04	19.77	0.31
1198	625.1	33.09855454	-103.57506517	20.35	-0.06	21.72	0.30
1199	625.6	33.09854895	-103.57506610	20.59	-0.05	23.98	0.32
1200	626.1	33.09854338	-103.57506721	26.45	-0.11	26.17	0.26
1201	626.6	33.09853780	-103.57506835	23.59	-0.05	27.62	0.30
1202	627.2	33.09853222	-103.57506946	30.20	-0.11	31.60	0.31
1203	627.7	33.09852660	-103.57507056	33.79	-0.06	32.77	0.34
1204	628.2	33.09852048	-103.57507142	42.73	-0.08	35.51	0.31
1205	628.7	33.09851438	-103.57507220	48.32	-0.05	46.17	0.31
1206	629.3	33.09850845	-103.57507238	48.48	-0.03	52.77	0.38
1207	629.8	33.09850242	-103.57507264	53.63	-0.05	56.95	0.38
1208	630.3	33.09849612	-103.57507321	59.14	-0.01	59.30	0.37
1209	630.8	33.09848985	-103.57507394	66.13	-0.05	65.12	0.34
1210	631.3	33.09848365	-103.57507508	64.92	0.02	72.62	0.40
1211	631.9	33.09847746	-103.57507612	66.68	-0.02	77.03	0.36
1212	632.4	33.09847127	-103.57507696	63.71	-0.01	79.34	0.37
1213	632.9	33.09846504	-103.57507807	65.23	-0.02	83.24	0.33
1214	633.4	33.09845877	-103.57507949	67.27	0.01	87.85	0.40
1215	634.0	33.09845263	-103.57508077	70.39	-0.03	94.45	0.39
1216	634.5	33.09844659	-103.57508193	72.15	0.00	96.37	0.40
1217	635.0	33.09844037	-103.57508287	73.75	-0.03	100.43	0.40
1218	635.5	33.09843402	-103.57508369	75.43	0.01	106.52	0.41
1219	636.0	33.09842794	-103.57508457	74.06	0.01	105.20	0.42
1220	636.6	33.09842196	-103.57508547	79.14	0.00	109.84	0.44
1221	637.1	33.09841579	-103.57508645	81.33	0.02	112.54	0.48
1222	637.6	33.09840957	-103.57508745	91.17	-0.05	117.19	0.43
1223	638.1	33.09840327	-103.57508855	90.35	0.01	122.73	0.45
1224	638.7	33.09839694	-103.57508968	89.34	-0.03	113.75	0.40
1225	639.2	33.09839078	-103.57509084	84.49	0.02	108.28	0.46
1226	639.7	33.09838463	-103.57509199	76.88	-0.21	110.47	0.35
1227	640.2	33.09837833	-103.57509290	78.20	-0.04	98.40	0.36
1228	640.8	33.09837204	-103.57509384	87.31	-0.07	112.34	0.34
1229	641.3	33.09836577	-103.57509508	89.10	-0.01	107.81	0.42
1230	641.8	33.09835964	-103.57509648	106.33	-0.08	96.88	0.39
1231	642.3	33.09835396	-103.57509847	97.97	-0.04	90.31	0.42
1232	642.8	33.09834819	-103.57510032	102.89	-0.08	106.02	0.35
1233	643.4	33.09834245	-103.57510180	86.37	-0.05	89.14	0.31
1234	643.9	33.09833664	-103.57510323	68.75	-0.13	80.55	0.20
1235	644.4	33.09833078	-103.57510455	56.09	-0.10	74.88	0.22
1236	644.9	33.09832465	-103.57510592	48.01	-0.10	64.49	0.21
1237	645.5	33.09831823	-103.57510736	43.16	-0.10	54.18	0.23
1238	646.0	33.09831180	-103.57510903	37.42	-0.10	47.62	0.25
1239	646.5	33.09830532	-103.57511090	34.84	-0.13	41.37	0.25
1240	647.0	33.09829867	-103.57511287	27.34	-0.09	33.79	0.28

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Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1241	647.5	33.09829189	-103.57511490	29.22	-0.12	30.55	0.24
1242	648.1	33.09828548	-103.57511706	21.41	-0.05	25.27	0.25
1243	648.6	33.09827921	-103.57511927	23.63	-0.10	23.56	0.22
1244	649.1	33.09827298	-103.57512116	18.83	-0.04	21.29	0.26
1245	649.6	33.09826677	-103.57512297	21.48	-0.09	20.12	0.23
1246	650.1	33.09826045	-103.57512484	17.50	-0.04	19.57	0.29
1247	650.7	33.09825412	-103.57512673	26.41	-0.15	20.51	0.15
1248	651.2	33.09824792	-103.57512819	17.58	-0.03	18.09	0.24
1249	651.7	33.09824173	-103.57512963	19.96	-0.04	19.84	0.23
1250	652.2	33.09823539	-103.57513098	18.79	-0.04	20.66	0.27
1251	652.8	33.09822897	-103.57513234	30.16	-0.09	26.02	0.21
1252	653.3	33.09822210	-103.57513372	33.16	-0.02	20.35	0.27
1253	653.8	33.09821532	-103.57513516	49.41	-0.07	28.83	0.23
1254	654.3	33.09820874	-103.57513684	41.13	-0.02	28.52	0.24
1255	654.8	33.09820225	-103.57513858	43.05	-0.10	28.83	0.15
1256	655.4	33.09819591	-103.57514044	31.95	-0.02	29.81	0.24
1257	655.9	33.09818960	-103.57514229	40.74	-0.16	31.64	0.08
1258	656.4	33.09818335	-103.57514410	34.49	-0.05	27.34	0.19
1259	656.9	33.09817707	-103.57514590	38.71	-0.10	27.38	0.18
1260	657.5	33.09817079	-103.57514770	36.76	-0.04	29.57	0.23
1261	658.0	33.09816456	-103.57514952	45.35	-0.11	33.44	0.17
1262	658.5	33.09815836	-103.57515137	49.57	-0.06	36.60	0.22
1263	659.0	33.09815205	-103.57515314	65.43	-0.12	43.32	0.26
1264	659.5	33.09814569	-103.57515487	76.76	-0.09	47.54	0.34
1265	660.1	33.09813926	-103.57515658	87.19	-0.15	58.52	0.31
1266	660.6	33.09813279	-103.57515829	81.72	-0.10	58.59	0.34
1267	661.1	33.09812622	-103.57515986	75.04	-0.15	53.56	0.31
1268	661.6	33.09811961	-103.57516139	58.56	-0.11	42.07	0.33
1269	662.1	33.09811296	-103.57516242	50.74	-0.12	39.18	0.30
1270	662.7	33.09810629	-103.57516341	37.81	-0.06	33.44	0.27
1271	663.2	33.09809978	-103.57516448	31.02	-0.08	28.48	0.23
1272	663.7	33.09809328	-103.57516557	30.12	-0.03	27.50	0.24
1273	664.2	33.09808677	-103.57516686	26.48	-0.05	25.08	0.22
1274	664.8	33.09808009	-103.57516813	30.00	-0.03	27.42	0.25
1275	665.3	33.09807347	-103.57516916	31.64	-0.07	29.57	0.22
1276	665.8	33.09806677	-103.57517024	36.68	-0.05	29.92	0.20
1277	666.3	33.09806033	-103.57517137	36.95	-0.10	31.99	0.21
1278	666.9	33.09805379	-103.57517244	38.48	0.11	35.66	0.46
1279	667.4	33.09804707	-103.57517335	43.59	-0.05	41.88	0.28
1280	667.9	33.09804025	-103.57517417	49.06	-0.05	40.51	0.21
1281	668.4	33.09803335	-103.57517486	56.09	-0.11	45.47	0.17
1282	668.9	33.09802675	-103.57517554	54.30	-0.07	47.15	0.19
1283	669.5	33.09802046	-103.57517623	58.52	-0.09	50.47	0.16
1284	670.0	33.09801396	-103.57517697	65.78	-0.05	55.39	0.19
1285	670.5	33.09800732	-103.57517775	69.61	-0.09	54.73	0.17
1286	671.0	33.09800062	-103.57517839	70.70	-0.06	60.00	0.21
1287	671.6	33.09799391	-103.57517895	73.16	-0.08	67.34	0.22
1288	672.1	33.09798749	-103.57517961	73.91	-0.05	65.74	0.24
1289	672.6	33.09798117	-103.57518029	75.08	-0.08	66.76	0.24
1290	673.1	33.09797468	-103.57518107	79.02	-0.06	68.01	0.25
1291	673.6	33.09796819	-103.57518187	82.38	-0.08	70.74	0.26
1292	674.2	33.09796171	-103.57518246	87.81	-0.07	76.21	0.27
1293	674.7	33.09795522	-103.57518304	88.59	-0.09	80.35	0.27
1294	675.2	33.09794870	-103.57518386	97.62	-0.07	80.66	0.28
1295	675.7	33.09794220	-103.57518467	106.37	-0.12	84.65	0.27
1296	676.3	33.09793598	-103.57518530	111.45	-0.08	89.77	0.25
1297	676.8	33.09792968	-103.57518580	113.95	-0.08	89.10	0.25
1298	677.3	33.09792319	-103.57518573	116.37	-0.07	96.84	0.27
1299	677.8	33.09791669	-103.57518573	117.97	-0.08	97.03	0.26
1300	678.3	33.09791013	-103.57518592	126.88	-0.08	100.98	0.25
1301	678.9	33.09790361	-103.57518628	118.36	-0.07	90.04	0.23
1302	679.4	33.09789715	-103.57518697	111.88	-0.08	88.24	0.20

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Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1303	679.9	33.09789068	-103.57518760	98.59	-0.05	89.69	0.22
1304	680.4	33.09788416	-103.57518816	111.72	-0.09	94.77	0.21
1305	681.0	33.09787782	-103.57518839	93.44	-0.04	72.85	0.25
1306	681.5	33.09787164	-103.57518835	71.29	-0.11	43.87	0.20
1307	682.0	33.09786526	-103.57518825	47.97	-0.05	41.06	0.21
1308	682.5	33.09785873	-103.57518812	36.52	-0.09	34.26	0.18
1309	683.0	33.09785229	-103.57518807	25.23	-0.05	28.28	0.23
1310	683.6	33.09784592	-103.57518805	26.13	-0.13	22.07	0.16
1311	684.1	33.09783972	-103.57518796	17.58	-0.04	18.59	0.24
1312	684.6	33.09783357	-103.57518785	18.79	-0.10	17.50	0.18
1313	685.1	33.09782747	-103.57518758	13.24	-0.04	14.45	0.22
1314	685.7	33.09782141	-103.57518728	14.81	-0.08	14.30	0.20
1315	686.2	33.09781526	-103.57518807	12.62	-0.03	13.20	0.21
1316	686.7	33.09780913	-103.57518894	15.04	-0.07	12.81	0.18
1317	687.2	33.09780324	-103.57519065	14.22	-0.02	13.71	0.21
1318	687.7	33.09779735	-103.57519238	13.75	-0.03	12.93	0.27
1319	688.3	33.09779141	-103.57519422	13.32	-0.01	13.16	0.28
1320	688.8	33.09778599	-103.57519693	11.95	-0.01	12.46	0.27
1321	689.3	33.09778244	-103.57520294	7.27	0.08	11.06	0.26
1322	689.8	33.09778030	-103.57520945	9.30	0.05	11.68	0.25
1323	690.4	33.09778148	-103.57521678	11.84	0.01	11.95	0.25
1324	690.9	33.09778350	-103.57522375	10.20	0.03	11.88	0.25
1325	691.4	33.09778690	-103.57523000	13.40	-0.03	12.42	0.23
1326	691.9	33.09779099	-103.57523585	11.25	0.00	12.03	0.23
1327	692.4	33.09779587	-103.57524127	15.43	-0.05	12.93	0.19
1328	693.0	33.09780137	-103.57524552	11.41	-0.01	12.31	0.20
1329	693.5	33.09780738	-103.57524883	15.39	-0.06	13.91	0.15
1330	694.0	33.09781384	-103.57525080	12.62	-0.01	13.83	0.20
1331	694.5	33.09782059	-103.57525201	22.50	-0.12	15.51	0.12
1332	695.1	33.09782736	-103.57525255	14.06	-0.04	14.02	0.18
1333	695.6	33.09783415	-103.57525281	19.02	-0.10	15.43	0.14
1334	696.1	33.09784091	-103.57525200	14.53	-0.04	14.73	0.18
1335	696.6	33.09784768	-103.57525093	17.81	-0.08	15.86	0.17
1336	697.1	33.09785465	-103.57525035	14.61	-0.05	15.70	0.21
1337	697.7	33.09786162	-103.57524984	22.70	-0.14	17.85	0.11
1338	698.2	33.09786844	-103.57524930	16.13	-0.06	17.73	0.17
1339	698.7	33.09787525	-103.57524872	21.76	-0.10	20.43	0.13
1340	699.2	33.09788182	-103.57524760	20.90	-0.05	23.71	0.18
1341	699.8	33.09788841	-103.57524638	32.31	-0.10	28.52	0.17
1342	700.3	33.09789505	-103.57524465	42.73	-0.07	34.18	0.19
1343	700.8	33.09790167	-103.57524285	68.63	-0.13	42.97	0.11
1344	701.3	33.09790818	-103.57524085	81.48	-0.05	60.39	0.18
1345	701.8	33.09791481	-103.57523882	93.71	-0.09	86.06	0.16
1346	702.4	33.09792158	-103.57523672	99.77	-0.05	88.71	0.19
1347	702.9	33.09792825	-103.57523445	108.63	-0.09	82.15	0.18
1348	703.4	33.09793470	-103.57523193	106.41	-0.04	93.52	0.24
1349	703.9	33.09794117	-103.57522929	113.16	-0.10	96.02	0.21
1350	704.5	33.09794765	-103.57522653	108.32	-0.05	94.30	0.26
1351	705.0	33.09795413	-103.57522388	105.74	-0.11	87.46	0.24
1352	705.5	33.09796057	-103.57522132	89.41	-0.07	79.69	0.27
1353	706.0	33.09796719	-103.57521911	88.20	-0.11	78.71	0.23
1354	706.5	33.09797392	-103.57521707	82.15	-0.07	75.31	0.25
1355	707.1	33.09798068	-103.57521510	81.91	-0.09	69.77	0.23
1356	707.6	33.09798746	-103.57521314	74.88	-0.07	68.05	0.24
1357	708.1	33.09799430	-103.57521139	74.26	-0.08	65.70	0.23
1358	708.6	33.09800118	-103.57520967	72.27	-0.05	68.83	0.23
1359	709.1	33.09800780	-103.57520782	78.09	-0.09	67.50	0.19
1360	709.7	33.09801439	-103.57520595	72.31	-0.06	67.58	0.21
1361	710.2	33.09802115	-103.57520376	74.02	-0.08	66.17	0.21
1362	710.7	33.09802791	-103.57520157	68.48	-0.05	60.74	0.23
1363	711.2	33.09803438	-103.57519958	68.75	-0.10	56.91	0.20
1364	711.8	33.09804097	-103.57519755	61.29	-0.06	53.67	0.21

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1365	712.3	33.09804722	-103.57519556	62.42	-0.11	48.36	0.20
1366	712.8	33.09805369	-103.57519362	53.05	-0.06	45.27	0.23
1367	713.3	33.09806042	-103.57519193	53.28	-0.10	42.50	0.19
1368	713.9	33.09806713	-103.57519026	45.66	-0.05	44.81	0.21
1369	714.4	33.09807388	-103.57518863	45.23	-0.10	40.59	0.20
1370	714.9	33.09808052	-103.57518696	36.29	-0.05	36.99	0.21
1371	715.4	33.09808695	-103.57518526	41.52	-0.06	35.04	0.27
1372	715.9	33.09809351	-103.57518349	39.84	-0.02	33.05	0.37
1373	716.5	33.09810020	-103.57518164	41.48	-0.07	34.14	0.27
1374	717.0	33.09810680	-103.57517961	43.01	-0.07	38.40	0.28
1375	717.5	33.09811333	-103.57517745	51.99	-0.13	42.81	0.28
1376	718.0	33.09811998	-103.57517549	60.78	-0.08	40.78	0.36
1377	718.6	33.09812669	-103.57517363	82.77	-0.16	50.74	0.33
1378	719.1	33.09813332	-103.57517182	84.61	-0.11	56.52	0.36
1379	719.6	33.09813994	-103.57517001	95.70	-0.16	64.30	0.29
1380	720.1	33.09814659	-103.57516822	75.86	-0.09	55.82	0.32
1381	720.6	33.09815326	-103.57516643	66.21	-0.12	49.22	0.26
1382	721.2	33.09815976	-103.57516442	47.81	-0.07	41.02	0.24
1383	721.7	33.09816623	-103.57516240	46.72	-0.10	38.63	0.18
1384	722.2	33.09817270	-103.57516046	39.14	-0.05	34.30	0.22
1385	722.7	33.09817915	-103.57515855	42.93	-0.12	32.27	0.16
1386	723.3	33.09818566	-103.57515677	31.68	-0.05	26.25	0.19
1387	723.8	33.09819231	-103.57515495	36.80	-0.12	29.92	0.14
1388	724.3	33.09819910	-103.57515305	32.19	-0.04	31.25	0.20
1389	724.8	33.09820593	-103.57515111	44.45	-0.10	30.90	0.17
1390	725.3	33.09821269	-103.57514913	47.97	-0.03	27.85	0.22
1391	725.9	33.09821928	-103.57514717	49.10	-0.05	32.54	0.22
1392	726.4	33.09822565	-103.57514524	33.98	-0.05	21.25	0.26
1393	726.9	33.09823190	-103.57514363	31.45	-0.12	27.77	0.18
1394	727.4	33.09823804	-103.57514241	19.84	-0.05	24.34	0.21
1395	728.0	33.09824435	-103.57514112	20.78	-0.09	21.06	0.22
1396	728.5	33.09825084	-103.57513977	17.34	-0.06	19.45	0.23
1397	729.0	33.09825727	-103.57513843	21.80	-0.12	20.12	0.19
1398	729.5	33.09826366	-103.57513709	16.64	-0.06	19.92	0.23
1399	730.0	33.09826986	-103.57513566	24.65	-0.13	20.94	0.19
1400	730.6	33.09827599	-103.57513419	19.22	-0.07	21.29	0.25
1401	731.1	33.09828233	-103.57513277	25.31	-0.14	23.52	0.17
1402	731.6	33.09828873	-103.57513136	21.72	-0.08	24.81	0.25
1403	732.1	33.09829518	-103.57513030	29.49	-0.16	28.91	0.20
1404	732.7	33.09830163	-103.57512930	27.19	-0.10	31.21	0.24
1405	733.2	33.09830824	-103.57512844	35.86	-0.16	36.84	0.18
1406	733.7	33.09831485	-103.57512759	38.75	-0.11	42.66	0.23
1407	734.2	33.09832156	-103.57512676	50.98	-0.16	52.81	0.21
1408	734.7	33.09832824	-103.57512589	54.30	-0.09	60.43	0.24
1409	735.3	33.09833460	-103.57512472	72.07	-0.17	73.87	0.16
1410	735.8	33.09834079	-103.57512349	84.18	-0.08	88.40	0.24
1411	736.3	33.09834627	-103.57512207	87.50	-0.10	90.66	0.26
1412	736.8	33.09835184	-103.57512069	90.08	-0.08	89.77	0.32
1413	737.4	33.09835732	-103.57511947	95.63	-0.14	106.09	0.28
1414	737.9	33.09836313	-103.57511838	89.92	-0.08	93.36	0.30
1415	738.4	33.09836934	-103.57511756	95.12	-0.09	118.56	0.35
1416	738.9	33.09837536	-103.57511695	90.94	-0.05	116.99	0.37
1417	739.4	33.09838115	-103.57511660	88.79	-0.02	101.76	0.38
1418	740.0	33.09838689	-103.57511614	94.57	-0.01	111.95	0.41
1419	740.5	33.09839255	-103.57511559	92.15	0.01	127.27	0.43
1420	741.0	33.09839811	-103.57511500	102.97	-0.03	131.37	0.41
1421	741.5	33.09840361	-103.57511439	106.64	0.00	119.65	0.44
1422	742.1	33.09840904	-103.57511401	114.22	-0.08	126.91	0.39
1423	742.6	33.09841444	-103.57511371	117.97	-0.01	121.29	0.45
1424	743.1	33.09841979	-103.57511398	104.84	-0.05	117.27	0.42
1425	743.6	33.09842513	-103.57511440	95.20	-0.02	124.06	0.44
1426	744.1	33.09843109	-103.57511444	93.71	-0.04	125.39	0.43

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1427	744.7	33.09843714	-103.57511443	95.23	-0.03	120.86	0.41
1428	745.2	33.09844339	-103.57511417	89.84	-0.02	117.15	0.39
1429	745.7	33.09844960	-103.57511391	88.63	-0.06	110.12	0.32
1430	746.2	33.09845553	-103.57511361	75.31	-0.01	95.35	0.34
1431	746.8	33.09846152	-103.57511340	74.73	-0.09	87.42	0.28
1432	747.3	33.09846786	-103.57511369	63.59	0.00	82.50	0.32
1433	747.8	33.09847425	-103.57511386	67.03	-0.10	76.09	0.22
1434	748.3	33.09848081	-103.57511360	56.60	0.01	70.35	0.34
1435	748.8	33.09848736	-103.57511302	61.13	-0.07	66.84	0.29
1436	749.4	33.09849383	-103.57511170	55.51	-0.01	61.95	0.30
1437	749.9	33.09850027	-103.57511045	60.59	-0.12	63.40	0.23
1438	750.4	33.09850669	-103.57510931	51.41	-0.03	57.23	0.31
1439	750.9	33.09851314	-103.57510826	50.08	-0.11	49.18	0.27
1440	751.5	33.09851963	-103.57510732	37.11	-0.03	41.99	0.31
1441	752.0	33.09852595	-103.57510639	33.36	-0.09	39.22	0.27
1442	752.5	33.09853217	-103.57510548	24.96	-0.03	34.10	0.32
1443	753.0	33.09853814	-103.57510458	27.81	-0.09	30.55	0.29
1444	753.5	33.09854399	-103.57510368	22.62	-0.02	28.13	0.32
1445	754.1	33.09854987	-103.57510282	21.56	-0.08	24.49	0.29
1446	754.6	33.09855579	-103.57510197	19.26	-0.04	22.93	0.34
1447	755.1	33.09856207	-103.57510155	16.88	-0.05	21.64	0.32
1448	755.6	33.09856842	-103.57510124	17.50	-0.03	19.96	0.31
1449	756.1	33.09857450	-103.57510055	14.61	-0.02	18.20	0.31
1450	756.7	33.09858054	-103.57509983	18.71	-0.04	18.13	0.27
1451	757.2	33.09858638	-103.57509901	14.02	0.00	17.34	0.32
1452	757.7	33.09859222	-103.57509819	20.70	-0.10	18.40	0.22
1453	758.2	33.09859812	-103.57509739	13.95	0.00	16.33	0.27
1454	758.8	33.09860399	-103.57509672	21.99	-0.12	17.46	0.18
1455	759.3	33.09860982	-103.57509677	15.39	-0.04	15.94	0.26
1456	759.8	33.09861554	-103.57509657	16.84	-0.10	16.29	0.24
1457	760.3	33.09862101	-103.57509561	15.00	-0.07	15.98	0.26
1458	760.9	33.09862622	-103.57509478	15.00	-0.10	16.45	0.23
1459	761.4	33.09863096	-103.57509417	15.94	-0.09	15.78	0.27
1460	761.9	33.09863575	-103.57509391	14.02	-0.07	14.45	0.31
1461	762.4	33.09864061	-103.57509415	17.66	-0.11	15.86	0.27
1462	762.9	33.09864519	-103.57509503	14.06	-0.07	15.31	0.32
1463	763.5	33.09864951	-103.57509655	14.14	-0.11	15.35	0.28
1464	764.0	33.09865351	-103.57509872	14.45	-0.07	14.84	0.33
1465	764.5	33.09865729	-103.57510135	13.56	-0.06	15.39	0.35
1466	765.0	33.09865989	-103.57510620	17.31	-0.10	15.86	0.34
1467	765.6	33.09866193	-103.57511213	13.79	-0.05	15.08	0.38
1468	766.1	33.09866294	-103.57511846	14.26	-0.09	15.16	0.31
1469	766.6	33.09866363	-103.57512494	13.24	-0.06	14.96	0.32
1470	767.1	33.09866298	-103.57513114	16.33	-0.11	14.96	0.28
1471	767.6	33.09866207	-103.57513730	13.28	-0.06	14.49	0.30
1472	768.2	33.09865911	-103.57514317	14.69	-0.09	14.65	0.25
1473	768.7	33.09865596	-103.57514901	14.92	-0.05	15.27	0.25
1474	769.2	33.09865134	-103.57515363	14.77	-0.06	15.20	0.26
1475	769.7	33.09864664	-103.57515809	16.29	-0.05	15.35	0.22
1476	770.3	33.09864101	-103.57516110	14.18	-0.04	15.20	0.23
1477	770.8	33.09863528	-103.57516393	19.38	-0.09	16.76	0.19
1478	771.3	33.09862913	-103.57516596	14.61	-0.03	17.19	0.19
1479	771.8	33.09862290	-103.57516801	17.50	-0.07	17.19	0.19
1480	772.3	33.09861673	-103.57517001	14.77	-0.02	16.56	0.22
1481	772.9	33.09861048	-103.57517175	21.84	-0.10	18.75	0.15
1482	773.4	33.09860414	-103.57517297	15.66	-0.02	18.40	0.21
1483	773.9	33.09859763	-103.57517420	20.66	-0.10	19.38	0.15
1484	774.4	33.09859094	-103.57517544	16.37	-0.02	17.77	0.19
1485	775.0	33.09858428	-103.57517657	23.13	-0.12	19.53	0.14
1486	775.5	33.09857766	-103.57517762	15.59	-0.01	18.20	0.24
1487	776.0	33.09857134	-103.57517880	21.02	-0.09	19.81	0.22
1488	776.5	33.09856520	-103.57518009	17.42	-0.04	18.95	0.28

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1489	777.0	33.09855874	-103.57518109	21.88	-0.10	19.96	0.22
1490	777.6	33.09855217	-103.57518197	17.58	-0.03	19.57	0.27
1491	778.1	33.09854559	-103.57518307	20.94	-0.08	20.70	0.24
1492	778.6	33.09853900	-103.57518424	18.63	-0.02	21.29	0.25
1493	779.1	33.09853226	-103.57518523	23.24	-0.08	22.07	0.20
1494	779.7	33.09852549	-103.57518619	20.98	-0.03	23.16	0.22
1495	780.2	33.09851879	-103.57518715	24.10	-0.07	24.88	0.20
1496	780.7	33.09851208	-103.57518809	25.23	-0.02	27.62	0.20
1497	781.2	33.09850539	-103.57518863	25.63	-0.06	30.59	0.19
1498	781.7	33.09849873	-103.57518922	30.47	-0.04	34.18	0.21
1499	782.3	33.09849213	-103.57519017	42.31	-0.07	39.65	0.20
1500	782.8	33.09848547	-103.57519114	54.10	-0.04	41.41	0.22
1501	783.3	33.09847866	-103.57519215	67.34	-0.07	49.06	0.20
1502	783.8	33.09847193	-103.57519318	73.16	-0.04	68.52	0.22
1503	784.4	33.09846578	-103.57519422	79.81	-0.06	72.27	0.19
1504	784.9	33.09845978	-103.57519517	93.52	-0.05	86.68	0.21
1505	785.4	33.09845415	-103.57519593	84.84	-0.02	77.50	0.24
1506	785.9	33.09844878	-103.57519668	85.63	-0.09	75.08	0.22
1507	786.4	33.09844367	-103.57519742	76.37	-0.03	84.30	0.27
1508	787.0	33.09843866	-103.57519822	71.52	-0.09	82.97	0.23
1509	787.5	33.09843375	-103.57519906	67.03	-0.06	80.20	0.24
1510	788.0	33.09842869	-103.57519972	65.74	-0.08	81.84	0.26
1511	788.5	33.09842353	-103.57520027	62.58	-0.06	81.21	0.26
1512	789.1	33.09841831	-103.57520056	55.39	-0.04	81.25	0.26
1513	789.6	33.09841304	-103.57520075	53.91	-0.06	80.63	0.31
1514	790.1	33.09840757	-103.57520131	58.63	-0.04	86.48	0.34
1515	790.6	33.09840204	-103.57520197	63.40	-0.06	90.31	0.31
1516	791.1	33.09839623	-103.57520322	67.23	-0.03	95.12	0.31
1517	791.7	33.09839039	-103.57520455	68.87	-0.03	96.41	0.32
1518	792.2	33.09838435	-103.57520545	76.88	-0.06	101.91	0.30
1519	792.7	33.09837833	-103.57520636	79.53	0.00	111.76	0.34
1520	793.2	33.09837231	-103.57520760	91.99	-0.08	115.35	0.28
1521	793.8	33.09836630	-103.57520883	100.16	-0.01	102.66	0.35
1522	794.3	33.09836044	-103.57520999	109.10	-0.12	110.59	0.27
1523	794.8	33.09835458	-103.57521108	96.29	-0.06	100.00	0.33
1524	795.3	33.09834868	-103.57521193	88.44	-0.13	101.76	0.24
1525	795.8	33.09834289	-103.57521275	79.06	-0.07	103.20	0.22
1526	796.4	33.09833736	-103.57521352	70.16	-0.08	93.24	0.24
1527	796.9	33.09833149	-103.57521438	75.94	-0.11	83.87	0.21
1528	797.4	33.09832515	-103.57521539	75.94	-0.08	80.59	0.21
1529	797.9	33.09831874	-103.57521659	79.77	-0.10	78.63	0.21
1530	798.5	33.09831227	-103.57521801	71.68	-0.06	71.02	0.21
1531	799.0	33.09830599	-103.57522004	72.31	-0.11	73.52	0.18
1532	799.5	33.09829986	-103.57522256	55.31	-0.05	64.38	0.22
1533	800.0	33.09829387	-103.57522507	49.02	-0.12	51.45	0.17
1534	800.5	33.09828796	-103.57522758	35.23	-0.05	42.89	0.22
1535	801.1	33.09828195	-103.57522976	35.04	-0.11	38.63	0.17
1536	801.6	33.09827591	-103.57523180	20.98	0.01	32.70	0.27
1537	802.1	33.09826970	-103.57523397	29.92	-0.09	33.71	0.21
1538	802.6	33.09826345	-103.57523616	30.31	-0.03	35.82	0.26
1539	803.2	33.09825755	-103.57523844	40.86	-0.08	37.58	0.20
1540	803.7	33.09825171	-103.57524072	51.21	-0.06	34.88	0.25
1541	804.2	33.09824539	-103.57524359	65.20	-0.12	44.26	0.16
1542	804.7	33.09823905	-103.57524647	63.48	-0.05	37.03	0.22
1543	805.2	33.09823270	-103.57524916	57.58	-0.12	36.95	0.18
1544	805.8	33.09822640	-103.57525181	40.39	-0.10	37.66	0.23
1545	806.3	33.09822022	-103.57525425	34.30	-0.13	31.64	0.22
1546	806.8	33.09821401	-103.57525673	26.17	-0.06	28.40	0.25
1547	807.3	33.09820774	-103.57525930	24.38	-0.09	26.72	0.20
1548	807.9	33.09820154	-103.57526186	22.42	-0.04	25.59	0.23
1549	808.4	33.09819548	-103.57526437	23.52	-0.07	24.49	0.22
1550	808.9	33.09818959	-103.57526672	23.79	-0.03	22.89	0.23

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Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1551	809.4	33.09818398	-103.57526883	19.69	-0.04	21.45	0.25
1552	809.9	33.09817812	-103.57527086	21.29	-0.07	21.76	0.24
1553	810.5	33.09817205	-103.57527278	19.45	-0.07	21.88	0.21
1554	811.0	33.09816609	-103.57527504	21.21	-0.08	21.41	0.18
1555	811.5	33.09816022	-103.57527752	19.73	-0.06	20.16	0.19
1556	812.0	33.09815420	-103.57528016	21.76	-0.08	20.94	0.19
1557	812.6	33.09814813	-103.57528286	14.57	-0.01	21.64	0.21
1558	813.1	33.09814228	-103.57528557	19.22	0.02	20.90	0.34
1559	813.6	33.09813651	-103.57528828	17.07	0.07	19.61	0.43
1560	814.1	33.09813063	-103.57529070	23.91	-0.08	22.27	0.23
1561	814.6	33.09812471	-103.57529308	21.91	-0.04	23.09	0.23
1562	815.2	33.09811862	-103.57529573	22.50	-0.06	23.13	0.16
1563	815.7	33.09811253	-103.57529841	21.41	-0.04	23.91	0.17
1564	816.2	33.09810648	-103.57530108	27.23	-0.07	27.07	0.15
1565	816.7	33.09810041	-103.57530373	29.14	-0.04	31.09	0.19
1566	817.3	33.09809425	-103.57530623	37.70	-0.08	34.53	0.16
1567	817.8	33.09808799	-103.57530881	38.28	-0.05	32.85	0.16
1568	818.3	33.09808149	-103.57531166	47.58	-0.09	33.20	0.13
1569	818.8	33.09807502	-103.57531454	49.38	-0.05	37.77	0.18
1570	819.3	33.09806871	-103.57531743	75.16	-0.09	44.45	0.13
1571	819.9	33.09806246	-103.57532046	84.57	-0.04	64.22	0.18
1572	820.4	33.09805630	-103.57532377	94.30	-0.10	77.23	0.15
1573	820.9	33.09805013	-103.57532705	95.27	-0.05	83.09	0.24
1574	821.4	33.09804390	-103.57533032	101.91	-0.13	91.33	0.15
1575	822.0	33.09803775	-103.57533361	102.31	-0.04	96.02	0.24
1576	822.5	33.09803164	-103.57533696	110.47	-0.08	92.77	0.21
1577	823.0	33.09802557	-103.57534014	109.06	-0.03	92.42	0.27
1578	823.5	33.09801951	-103.57534322	113.95	-0.12	100.00	0.18
1579	824.0	33.09801351	-103.57534619	106.13	-0.05	95.70	0.22
1580	824.6	33.09800753	-103.57534912	112.70	-0.13	101.52	0.17
1581	825.1	33.09800127	-103.57535151	103.59	-0.04	101.91	0.21
1582	825.6	33.09799491	-103.57535374	97.38	-0.08	93.91	0.17
1583	826.1	33.09798850	-103.57535630	88.24	-0.03	79.18	0.21
1584	826.7	33.09798205	-103.57535892	85.78	-0.09	76.91	0.17
1585	827.2	33.09797581	-103.57536204	66.13	-0.04	56.13	0.21
1586	827.7	33.09796960	-103.57536518	55.20	-0.12	49.65	0.14
1587	828.2	33.09796394	-103.57536835	38.67	-0.06	40.70	0.18
1588	828.7	33.09795824	-103.57537147	32.70	-0.11	33.36	0.14
1589	829.3	33.09795226	-103.57537418	23.36	-0.06	26.45	0.19
1590	829.8	33.09794638	-103.57537690	21.02	-0.10	20.66	0.15
1591	830.3	33.09794089	-103.57537960	16.02	-0.03	18.16	0.18
1592	830.8	33.09793534	-103.57538239	16.17	-0.07	17.42	0.16
1593	831.4	33.09792959	-103.57538541	15.16	-0.04	16.88	0.18
1594	831.9	33.09792385	-103.57538842	15.70	-0.07	16.09	0.18
1595	832.4	33.09791810	-103.57539143	12.93	-0.02	15.12	0.19
1596	832.9	33.09791276	-103.57539457	11.84	-0.03	14.73	0.22
1597	833.4	33.09790791	-103.57539788	16.02	-0.06	15.23	0.19
1598	834.0	33.09790275	-103.57540113	13.83	-0.03	14.84	0.20
1599	834.5	33.09789735	-103.57540433	16.64	-0.08	15.66	0.15
1600	835.0	33.09789171	-103.57540780	13.16	-0.05	14.61	0.19
1601	835.5	33.09788596	-103.57541141	13.36	-0.06	13.83	0.14
1602	836.1	33.09788062	-103.57541525	13.28	-0.04	13.56	0.19
1603	836.6	33.09787544	-103.57541918	19.14	-0.11	15.16	0.14
1604	837.1	33.09787131	-103.57542533	14.61	-0.04	14.22	0.17
1605	837.6	33.09786747	-103.57543203	13.71	-0.03	13.63	0.17
1606	838.1	33.09786803	-103.57543946	11.68	0.01	13.20	0.20
1607	838.7	33.09786917	-103.57544699	13.91	-0.06	13.59	0.17
1608	839.2	33.09787383	-103.57545265	11.95	-0.01	13.01	0.19
1609	839.7	33.09787872	-103.57545803	15.74	-0.08	13.67	0.17
1610	840.2	33.09788525	-103.57545956	13.36	-0.04	13.67	0.19
1611	840.8	33.09789176	-103.57546083	15.63	-0.09	13.59	0.17
1612	841.3	33.09789809	-103.57546041	16.06	-0.04	14.10	0.16

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1613	841.8	33.09790445	-103.57545981	15.31	-0.07	14.14	0.16
1614	842.3	33.09791100	-103.57545852	13.91	-0.03	14.38	0.18
1615	842.8	33.09791758	-103.57545702	15.43	-0.07	14.65	0.16
1616	843.4	33.09792417	-103.57545503	15.59	-0.02	15.16	0.16
1617	843.9	33.09793071	-103.57545310	16.48	-0.07	14.96	0.16
1618	844.4	33.09793708	-103.57545129	15.23	-0.05	14.96	0.19
1619	844.9	33.09794350	-103.57544915	15.39	-0.08	14.84	0.19
1620	845.5	33.09794995	-103.57544668	14.77	-0.03	15.04	0.21
1621	846.0	33.09795630	-103.57544425	16.41	-0.05	16.29	0.25
1622	846.5	33.09796254	-103.57544185	13.67	-0.13	15.66	0.13
1623	847.0	33.09796873	-103.57543970	14.81	-0.07	15.59	0.13
1624	847.5	33.09797487	-103.57543768	17.42	-0.06	17.23	0.18
1625	848.1	33.09798103	-103.57543547	18.28	-0.06	19.26	0.22
1626	848.6	33.09798720	-103.57543318	23.95	-0.05	23.79	0.21
1627	849.1	33.09799371	-103.57543075	29.81	-0.07	25.04	0.22
1628	849.6	33.09800027	-103.57542831	42.89	-0.05	29.34	0.21
1629	850.1	33.09800677	-103.57542575	52.81	-0.05	43.01	0.23
1630	850.7	33.09801325	-103.57542318	63.09	-0.04	53.59	0.21
1631	851.2	33.09801996	-103.57542070	72.23	-0.06	59.92	0.24
1632	851.7	33.09802669	-103.57541824	76.45	-0.04	70.59	0.24
1633	852.2	33.09803345	-103.57541606	84.22	-0.08	81.06	0.23
1634	852.8	33.09804018	-103.57541378	93.83	-0.06	85.94	0.21
1635	853.3	33.09804679	-103.57541102	96.06	-0.04	90.00	0.24
1636	853.8	33.09805332	-103.57540824	99.92	-0.05	91.41	0.24
1637	854.3	33.09805966	-103.57540538	95.70	-0.08	101.52	0.20
1638	854.9	33.09806603	-103.57540268	93.28	-0.06	92.19	0.23
1639	855.4	33.09807243	-103.57540036	91.95	-0.07	90.39	0.23
1640	855.9	33.09807885	-103.57539821	90.86	-0.05	77.15	0.19
1641	856.4	33.09808533	-103.57539631	81.45	-0.07	70.23	0.20
1642	856.9	33.09809173	-103.57539421	75.27	-0.07	78.87	0.19
1643	857.5	33.09809810	-103.57539190	64.96	-0.07	62.03	0.21
1644	858.0	33.09810438	-103.57538963	56.95	-0.06	50.00	0.21
1645	858.5	33.09811063	-103.57538736	44.30	-0.07	43.71	0.20
1646	859.0	33.09811694	-103.57538514	37.31	-0.06	37.73	0.22
1647	859.6	33.09812329	-103.57538294	33.01	-0.06	33.79	0.21
1648	860.1	33.09812961	-103.57538068	33.05	-0.06	32.85	0.21
1649	860.6	33.09813594	-103.57537840	31.95	-0.04	32.66	0.22
1650	861.1	33.09814195	-103.57537589	33.24	-0.06	31.99	0.21
1651	861.6	33.09814794	-103.57537331	30.00	-0.06	32.38	0.25
1652	862.2	33.09815409	-103.57537055	32.31	-0.05	34.22	0.22
1653	862.7	33.09816027	-103.57536776	32.89	-0.05	32.70	0.27
1654	863.2	33.09816638	-103.57536524	29.53	0.35	32.70	0.64
1655	863.7	33.09817250	-103.57536275	34.02	0.05	34.41	0.52
1656	864.3	33.09817873	-103.57536044	41.88	-0.06	37.66	0.30
1657	864.8	33.09818502	-103.57535806	39.06	-0.01	40.16	0.33
1658	865.3	33.09819104	-103.57535557	46.91	-0.06	43.40	0.29
1659	865.8	33.09819721	-103.57535305	48.56	-0.01	44.92	0.29
1660	866.3	33.09820352	-103.57535059	54.34	-0.07	46.68	0.26
1661	866.9	33.09820972	-103.57534815	54.26	0.00	51.64	0.26
1662	867.4	33.09821573	-103.57534578	65.70	-0.09	54.92	0.20
1663	867.9	33.09822149	-103.57534347	59.02	0.02	54.57	0.33
1664	868.4	33.09822694	-103.57534124	63.40	-0.07	58.87	0.28
1665	869.0	33.09823231	-103.57533933	67.42	-0.04	61.80	0.31
1666	869.5	33.09823757	-103.57533770	80.31	-0.08	69.73	0.28
1667	870.0	33.09824283	-103.57533617	86.91	-0.05	72.15	0.31
1668	870.5	33.09824809	-103.57533470	97.15	-0.07	72.15	0.30
1669	871.0	33.09825345	-103.57533305	107.93	-0.07	81.06	0.31
1670	871.6	33.09825887	-103.57533131	109.30	-0.03	89.69	0.34
1671	872.1	33.09826420	-103.57532948	118.75	-0.10	101.02	0.28
1672	872.6	33.09826951	-103.57532761	121.17	-0.02	101.29	0.34
1673	873.1	33.09827508	-103.57532552	130.59	-0.10	107.15	0.30
1674	873.7	33.09828066	-103.57532340	134.69	-0.07	114.84	0.32

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1675	874.2	33.09828645	-103.57532140	138.95	-0.12	124.02	0.29
1676	874.7	33.09829224	-103.57531942	152.85	-0.09	136.64	0.31
1677	875.2	33.09829795	-103.57531758	157.42	-0.10	137.81	0.33
1678	875.7	33.09830362	-103.57531577	175.20	-0.11	137.73	0.30
1679	876.3	33.09830907	-103.57531416	179.26	-0.07	151.13	0.32
1680	876.8	33.09831451	-103.57531252	184.84	-0.14	152.73	0.27
1681	877.3	33.09831988	-103.57531076	191.80	-0.07	181.09	0.33
1682	877.8	33.09832523	-103.57530902	189.26	-0.14	189.84	0.31
1683	878.4	33.09833047	-103.57530732	187.11	-0.06	168.28	0.39
1684	878.9	33.09833565	-103.57530551	193.05	-0.10	180.08	0.42
1685	879.4	33.09834068	-103.57530352	201.25	-0.11	195.70	0.39
1686	879.9	33.09834600	-103.57530161	202.89	-0.08	204.41	0.40
1687	880.4	33.09835165	-103.57529980	216.41	-0.14	175.20	0.37
1688	881.0	33.09835734	-103.57529814	196.29	-0.08	179.34	0.43
1689	881.5	33.09836304	-103.57529660	184.10	-0.18	200.12	0.41
1690	882.0	33.09836878	-103.57529528	143.32	-0.09	163.59	0.49
1691	882.5	33.09837453	-103.57529410	130.31	-0.13	157.46	0.41
1692	883.1	33.09838047	-103.57529278	109.73	-0.06	138.63	0.47
1693	883.6	33.09838648	-103.57529140	103.59	-0.11	120.04	0.41
1694	884.1	33.09839295	-103.57528962	93.40	-0.04	116.88	0.36
1695	884.6	33.09839950	-103.57528774	88.52	-0.05	107.42	0.36
1696	885.1	33.09840580	-103.57528567	86.29	-0.04	99.06	0.33
1697	885.7	33.09841206	-103.57528358	88.91	-0.09	99.65	0.26
1698	886.2	33.09841816	-103.57528133	84.96	-0.04	93.13	0.28
1699	886.7	33.09842426	-103.57527908	85.04	-0.07	87.93	0.25
1700	887.2	33.09843033	-103.57527700	81.02	-0.06	81.68	0.19
1701	887.8	33.09843639	-103.57527494	73.83	-0.04	72.23	0.23
1702	888.3	33.09844249	-103.57527289	69.57	-0.04	74.22	0.22
1703	888.8	33.09844860	-103.57527091	66.17	-0.02	67.54	0.24
1704	889.3	33.09845475	-103.57526918	62.50	-0.07	60.23	0.20
1705	889.8	33.09846091	-103.57526750	49.06	-0.04	47.50	0.24
1706	890.4	33.09846710	-103.57526595	39.77	-0.06	42.07	0.20
1707	890.9	33.09847330	-103.57526433	31.84	-0.03	38.44	0.22
1708	891.4	33.09847954	-103.57526261	29.57	-0.06	36.33	0.22
1709	891.9	33.09848571	-103.57526084	24.45	-0.03	30.70	0.23
1710	892.5	33.09849180	-103.57525900	26.68	-0.08	29.22	0.20
1711	893.0	33.09849776	-103.57525689	21.33	-0.01	27.81	0.22
1712	893.5	33.09850364	-103.57525453	27.93	-0.11	28.05	0.14
1713	894.0	33.09850968	-103.57525258	21.56	-0.04	25.78	0.22
1714	894.5	33.09851581	-103.57525086	25.51	-0.09	26.09	0.22
1715	895.1	33.09852192	-103.57524921	22.81	-0.05	26.13	0.27
1716	895.6	33.09852805	-103.57524759	29.88	-0.14	26.37	0.17
1717	896.1	33.09853418	-103.57524622	20.08	-0.05	22.70	0.18
1718	896.6	33.09854031	-103.57524491	19.45	-0.05	22.27	0.19
1719	897.1	33.09854639	-103.57524338	18.05	-0.02	22.07	0.22
1720	897.7	33.09855249	-103.57524181	19.88	-0.07	21.21	0.21
1721	898.2	33.09855882	-103.57524022	18.24	-0.04	21.56	0.23
1722	898.7	33.09856515	-103.57523865	18.91	-0.08	20.98	0.24
1723	899.2	33.09857125	-103.57523746	20.00	-0.05	21.29	0.25
1724	899.8	33.09857736	-103.57523621	19.45	-0.08	21.72	0.26
1725	900.3	33.09858354	-103.57523469	19.26	-0.04	21.45	0.26
1726	900.8	33.09858975	-103.57523305	19.38	-0.07	21.60	0.26
1727	901.3	33.09859595	-103.57523107	16.99	-0.01	21.48	0.27
1728	901.9	33.09860207	-103.57522886	17.77	-0.02	20.39	0.31
1729	902.4	33.09860800	-103.57522617	19.96	-0.03	21.02	0.29
1730	902.9	33.09861413	-103.57522385	19.18	-0.05	21.21	0.29
1731	903.4	33.09862056	-103.57522208	21.56	-0.07	21.84	0.23
1732	903.9	33.09862704	-103.57522038	17.97	-0.03	21.02	0.27
1733	904.5	33.09863359	-103.57521874	18.01	-0.02	20.20	0.26
1734	905.0	33.09863990	-103.57521690	18.32	-0.05	19.41	0.25
1735	905.5	33.09864605	-103.57521491	17.77	-0.04	19.81	0.22
1736	906.0	33.09865200	-103.57521260	17.77	-0.05	19.34	0.24

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1737	906.6	33.09865785	-103.57521013	19.06	-0.07	19.49	0.21
1738	907.1	33.09866412	-103.57520842	18.16	-0.07	18.28	0.27
1739	907.6	33.09867050	-103.57520697	21.41	-0.10	19.45	0.23
1740	908.1	33.09867674	-103.57520663	17.58	-0.04	20.12	0.25
1741	908.6	33.09868295	-103.57520651	20.70	-0.11	18.71	0.26
1742	909.2	33.09868846	-103.57520760	17.27	-0.08	17.27	0.28
1743	909.7	33.09869389	-103.57520879	18.98	-0.12	17.85	0.25
1744	910.2	33.09869706	-103.57521240	16.06	-0.07	18.44	0.31
1745	910.7	33.09869989	-103.57521621	17.03	-0.12	18.13	0.27
1746	911.3	33.09869936	-103.57522189	16.72	-0.07	18.48	0.35
1747	911.8	33.09869812	-103.57522753	22.58	-0.14	19.61	0.26
1748	912.3	33.09869386	-103.57523264	17.58	-0.05	18.63	0.31
1749	912.8	33.09868918	-103.57523738	21.29	-0.12	19.45	0.24
1750	913.3	33.09868347	-103.57524093	18.32	-0.07	19.45	0.28
1751	913.9	33.09867739	-103.57524415	20.35	-0.10	20.00	0.28
1752	914.4	33.09867067	-103.57524676	17.97	-0.05	20.08	0.30
1753	914.9	33.09866407	-103.57524923	23.67	-0.11	21.48	0.23
1754	915.4	33.09865760	-103.57525152	20.16	-0.06	20.70	0.24
1755	916.0	33.09865119	-103.57525396	22.19	-0.09	22.19	0.16
1756	916.5	33.09864486	-103.57525654	19.30	-0.02	22.73	0.16
1757	917.0	33.09863840	-103.57525886	21.64	-0.08	24.06	0.17
1758	917.5	33.09863181	-103.57526101	21.76	-0.04	25.47	0.19
1759	918.0	33.09862532	-103.57526327	25.20	-0.08	27.03	0.16
1760	918.6	33.09861888	-103.57526557	27.73	-0.06	28.75	0.16
1761	919.1	33.09861246	-103.57526797	30.90	-0.10	28.71	0.17
1762	919.6	33.09860606	-103.57527038	28.87	-0.07	30.12	0.17
1763	920.1	33.09859956	-103.57527231	27.62	-0.10	30.47	0.16
1764	920.7	33.09859304	-103.57527414	25.08	-0.06	29.77	0.18
1765	921.2	33.09858681	-103.57527637	26.88	-0.09	28.79	0.19
1766	921.7	33.09858060	-103.57527862	27.34	-0.08	29.26	0.20
1767	922.2	33.09857476	-103.57528100	27.50	-0.09	29.92	0.21
1768	922.7	33.09856891	-103.57528336	28.59	-0.06	30.74	0.20
1769	923.3	33.09856278	-103.57528555	34.84	-0.07	30.66	0.23
1770	923.8	33.09855665	-103.57528763	45.08	-0.13	33.44	0.20
1771	924.3	33.09855049	-103.57528931	39.10	-0.07	35.35	0.23
1772	924.8	33.09854425	-103.57529100	41.25	-0.09	41.33	0.21
1773	925.4	33.09853785	-103.57529271	32.62	-0.05	33.87	0.22
1774	925.9	33.09853152	-103.57529448	35.39	-0.12	35.27	0.17
1775	926.4	33.09852537	-103.57529636	25.90	-0.04	31.91	0.24
1776	926.9	33.09851902	-103.57529835	31.80	-0.13	32.50	0.15
1777	927.4	33.09851248	-103.57530047	24.77	-0.03	30.12	0.23
1778	928.0	33.09850594	-103.57530232	26.37	-0.07	31.17	0.20
1779	928.5	33.09849940	-103.57530395	25.35	-0.04	31.21	0.23
1780	929.0	33.09849294	-103.57530570	28.71	-0.08	30.59	0.19
1781	929.5	33.09848649	-103.57530755	26.29	-0.03	33.32	0.25
1782	930.1	33.09848015	-103.57530970	29.30	-0.07	32.70	0.23
1783	930.6	33.09847385	-103.57531198	25.16	-0.02	31.37	0.25
1784	931.1	33.09846749	-103.57531445	30.55	-0.09	32.19	0.20
1785	931.6	33.09846112	-103.57531698	25.16	-0.03	31.33	0.26
1786	932.1	33.09845458	-103.57531957	27.34	-0.07	33.83	0.23
1787	932.7	33.09844801	-103.57532217	25.94	-0.01	34.34	0.28
1788	933.2	33.09844165	-103.57532465	35.31	-0.11	35.55	0.21
1789	933.7	33.09843530	-103.57532711	28.16	-0.02	34.18	0.31
1790	934.2	33.09842940	-103.57532912	29.61	-0.06	36.09	0.26
1791	934.8	33.09842346	-103.57533116	28.40	-0.03	39.38	0.28
1792	935.3	33.09841721	-103.57533341	33.36	-0.07	42.62	0.24
1793	935.8	33.09841103	-103.57533570	34.92	-0.04	45.94	0.27
1794	936.3	33.09840507	-103.57533818	47.73	-0.12	52.89	0.24
1795	936.8	33.09839910	-103.57534066	54.06	-0.07	63.32	0.27
1796	937.4	33.09839306	-103.57534317	69.73	-0.12	77.03	0.24
1797	937.9	33.09838699	-103.57534560	89.88	-0.07	95.70	0.29
1798	938.4	33.09838086	-103.57534790	118.63	-0.11	120.12	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1799	938.9	33.09837462	-103.57535010	152.66	-0.09	133.24	0.35
1800	939.5	33.09836827	-103.57535217	163.36	-0.10	155.70	0.41
1801	940.0	33.09836186	-103.57535428	158.75	-0.08	191.76	0.46
1802	940.5	33.09835539	-103.57535644	150.08	-0.11	185.04	0.43
1803	941.0	33.09834898	-103.57535852	138.91	-0.09	165.35	0.42
1804	941.5	33.09834262	-103.57536055	124.10	-0.11	140.27	0.40
1805	942.1	33.09833621	-103.57536262	111.95	-0.07	142.50	0.41
1806	942.6	33.09832976	-103.57536472	108.48	-0.09	141.48	0.41
1807	943.1	33.09832335	-103.57536710	112.27	-0.06	145.47	0.37
1808	943.6	33.09831695	-103.57536954	135.16	-0.10	144.22	0.36
1809	944.1	33.09831074	-103.57537168	174.45	-0.09	139.41	0.33
1810	944.7	33.09830456	-103.57537378	188.71	-0.09	138.09	0.35
1811	945.2	33.09829803	-103.57537589	186.48	-0.06	164.26	0.36
1812	945.7	33.09829153	-103.57537796	176.09	-0.08	161.48	0.36
1813	946.2	33.09828509	-103.57537968	162.31	-0.05	150.86	0.35
1814	946.8	33.09827870	-103.57538150	156.06	-0.07	142.66	0.36
1815	947.3	33.09827254	-103.57538392	156.33	-0.06	151.13	0.32
1816	947.8	33.09826642	-103.57538628	144.26	-0.06	147.54	0.35
1817	948.3	33.09826038	-103.57538847	139.18	-0.05	136.91	0.32
1818	948.9	33.09825423	-103.57539068	128.63	-0.06	123.20	0.31
1819	949.4	33.09824782	-103.57539291	123.71	-0.02	120.90	0.37
1820	949.9	33.09824135	-103.57539504	108.67	-0.01	106.13	0.42
1821	950.4	33.09823482	-103.57539701	96.13	-0.02	100.98	0.39
1822	950.9	33.09822927	-103.57539993	93.98	-0.03	100.39	0.37
1823	951.5	33.09822472	-103.57540383	89.81	0.00	95.90	0.43
1824	952.0	33.09822227	-103.57540936	90.59	0.04	95.43	0.47
1825	952.5	33.09822135	-103.57541609	93.32	-0.05	97.42	0.38
1826	953.0	33.09822178	-103.57542292	96.72	0.01	107.27	0.42
1827	953.6	33.09822290	-103.57542983	109.49	-0.01	111.64	0.56
1828	954.1	33.09822401	-103.57543673	116.13	0.11	124.92	1.11
1829	954.6	33.09822510	-103.57544360	143.32	0.30	148.24	2.36
1830	955.1	33.09822520	-103.57545020	-147.97	-6.72	36.06	-6.70
1831	955.6	33.09822510	-103.57545674	67.70	-2.05	15.51	-8.56
1832	956.2	33.09822304	-103.57546312	103.67	-0.29	134.57	0.10
1833	956.7	33.09822080	-103.57546945	125.55	-0.09	146.41	0.70
1834	957.2	33.09821595	-103.57547322	137.07	0.04	156.37	1.00
1835	957.7	33.09821098	-103.57547679	142.11	-0.03	156.95	1.16
1836	958.3	33.09820493	-103.57547821	133.87	0.00	144.61	1.03
1837	958.8	33.09819885	-103.57547931	130.55	-0.05	146.88	0.90
1838	959.3	33.09819294	-103.57547895	125.12	-0.03	140.74	0.79
1839	959.8	33.09818729	-103.57547778	117.19	-0.10	125.20	0.69
1840	960.3	33.09818245	-103.57547441	96.91	0.00	103.52	0.40
1841	960.9	33.09817839	-103.57547024	83.01	0.04	99.69	0.83
1842	961.4	33.09817584	-103.57546460	71.52	0.09	87.34	1.25
1843	961.9	33.09817417	-103.57545861	65.74	0.11	84.06	1.39
1844	962.4	33.09817367	-103.57545216	62.31	0.09	71.48	1.34
1845	963.0	33.09817440	-103.57544584	59.30	0.08	71.06	1.24
1846	963.5	33.09817629	-103.57543965	57.85	0.04	65.51	0.99
1847	964.0	33.09817959	-103.57543433	56.21	0.08	66.21	0.91
1848	964.5	33.09818385	-103.57542959	57.11	0.02	62.89	0.83
1849	965.0	33.09818916	-103.57542651	53.95	0.05	63.24	0.73
1850	965.6	33.09819499	-103.57542418	63.05	0.01	69.38	0.64
1851	966.1	33.09820095	-103.57542337	65.00	0.12	72.23	0.87
1852	966.6	33.09820696	-103.57542302	74.57	0.02	79.18	0.87
1853	967.1	33.09821295	-103.57542312	78.16	0.01	88.40	0.68
1854	967.7	33.09821895	-103.57542331	87.38	-0.03	95.08	0.54
1855	968.2	33.09822304	-103.57542642	91.45	-0.01	101.48	0.46
1856	968.7	33.09822695	-103.57542979	98.98	-0.05	107.38	0.44
1857	969.2	33.09822850	-103.57543647	108.98	0.00	124.22	0.57
1858	969.7	33.09822978	-103.57544323	172.34	0.67	163.71	2.04
1859	970.3	33.09822885	-103.57545042	-193.20	-9.15	46.99	-5.50
1860	970.8	33.09822764	-103.57545755	87.85	-1.21	73.87	-3.77

EM38 Survey Results, Foundation Energy Management
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Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1861	971.3	33.09822533	-103.57546420	84.02	0.01	139.30	0.76
1862	971.8	33.09822232	-103.57547022	127.66	-0.02	145.43	0.78
1863	972.4	33.09821750	-103.57547456	142.62	0.02	156.25	0.84
1864	972.9	33.09821235	-103.57547793	149.65	-0.07	161.76	0.95
1865	973.4	33.09820667	-103.57547960	140.00	0.03	149.34	0.94
1866	973.9	33.09820068	-103.57548032	134.34	-0.06	145.31	0.78
1867	974.4	33.09819435	-103.57547988	128.05	-0.04	143.09	0.72
1868	975.0	33.09818841	-103.57547902	118.59	-0.08	127.27	0.59
1869	975.5	33.09818283	-103.57547783	101.25	0.01	110.27	0.48
1870	976.0	33.09817853	-103.57547437	86.84	-0.06	95.70	0.49
1871	976.5	33.09817503	-103.57546954	74.41	0.03	90.94	0.70
1872	977.1	33.09817310	-103.57546304	74.06	-0.02	84.10	0.81
1873	977.6	33.09817182	-103.57545587	62.77	0.03	77.31	0.82
1874	978.1	33.09817135	-103.57544805	57.46	-0.02	65.00	0.75
1875	978.6	33.09817109	-103.57544005	52.38	0.02	64.73	0.68
1876	979.1	33.09816775	-103.57543600	47.85	0.02	60.63	0.58
1877	979.7	33.09816398	-103.57543253	45.04	0.09	53.52	0.48
1878	980.2	33.09815763	-103.57543443	48.75	-0.03	51.84	-0.30
1879	980.7	33.09815116	-103.57543660	49.53	0.00	52.85	-0.23
1880	981.2	33.09814429	-103.57543991	59.84	-0.11	55.55	0.11
1881	981.8	33.09813747	-103.57544311	61.25	-0.03	59.81	0.22
1882	982.3	33.09813068	-103.57544579	78.20	-0.15	61.48	0.12
1883	982.8	33.09812387	-103.57544846	73.71	-0.06	60.74	0.24
1884	983.3	33.09811694	-103.57545112	94.02	-0.14	73.28	0.15
1885	983.8	33.09811022	-103.57545369	100.43	-0.03	77.03	0.24
1886	984.4	33.09810408	-103.57545605	119.81	-0.09	87.77	0.27
1887	984.9	33.09809764	-103.57545837	122.03	-0.05	95.78	0.33
1888	985.4	33.09809070	-103.57546065	119.77	-0.06	95.12	0.33
1889	985.9	33.09808388	-103.57546308	113.44	-0.07	95.20	0.35
1890	986.5	33.09807713	-103.57546571	102.27	-0.06	84.02	0.30
1891	987.0	33.09807056	-103.57546838	87.07	-0.03	73.91	0.31
1892	987.5	33.09806414	-103.57547109	74.69	-0.04	72.73	0.26
1893	988.0	33.09805808	-103.57547312	61.52	-0.05	62.97	0.31
1894	988.5	33.09805225	-103.57547476	55.43	-0.08	57.07	0.23
1895	989.1	33.09804622	-103.57547669	55.47	-0.03	52.97	0.22
1896	989.6	33.09804009	-103.57547874	47.27	-0.06	39.88	0.25
1897	990.1	33.09803396	-103.57548123	34.61	-0.03	36.80	0.22
1898	990.6	33.09802783	-103.57548382	28.67	-0.07	32.42	0.21
1899	991.1	33.09802161	-103.57548666	25.31	-0.04	28.44	0.21
1900	991.7	33.09801538	-103.57548953	24.57	-0.07	25.39	0.20
1901	992.2	33.09800893	-103.57549246	22.27	-0.05	23.01	0.17
1902	992.7	33.09800248	-103.57549539	22.23	-0.08	22.27	0.19
1903	993.2	33.09799635	-103.57549819	22.15	-0.05	21.84	0.17
1904	993.8	33.09799019	-103.57550095	19.18	-0.05	20.27	0.18
1905	994.3	33.09798390	-103.57550346	13.67	0.03	18.28	0.20
1906	994.8	33.09797761	-103.57550595	15.59	-0.03	17.42	0.17
1907	995.3	33.09797131	-103.57550840	15.82	-0.02	16.99	0.17
1908	995.9	33.09796505	-103.57551087	16.80	-0.05	16.99	0.19
1909	996.4	33.09795887	-103.57551340	15.27	-0.03	16.33	0.18
1910	996.9	33.09795268	-103.57551589	15.16	-0.06	15.70	0.18
1911	997.4	33.09794653	-103.57551828	14.53	-0.03	15.23	0.18
1912	997.9	33.09794020	-103.57552083	16.64	-0.06	15.20	0.20
1913	998.5	33.09793369	-103.57552354	15.98	-0.03	15.94	0.20
1914	999.0	33.09792741	-103.57552629	16.06	-0.06	14.61	0.19
1915	999.5	33.09792132	-103.57552906	14.26	-0.04	14.73	0.19
1916	1,000.0	33.09791547	-103.57553211	13.16	-0.05	13.83	0.18
1917	1,000.6	33.09790973	-103.57553531	9.88	0.02	13.56	0.19
1918	1,001.1	33.09790387	-103.57553818	14.06	-0.05	13.75	0.14
1919	1,001.6	33.09789794	-103.57554095	13.32	-0.03	13.95	0.14
1920	1,002.1	33.09789171	-103.57554330	13.13	-0.05	13.36	0.15
1921	1,002.6	33.09788541	-103.57554558	11.84	-0.03	13.36	0.17
1922	1,003.2	33.09787979	-103.57554790	10.66	-0.04	13.13	0.16

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
1923	1,003.7	33.09787423	-103.57555023	9.96	-0.03	12.58	0.15
1924	1,004.2	33.09786802	-103.57555273	12.07	-0.04	12.89	0.13
1925	1,004.7	33.09786180	-103.57555524	12.58	-0.02	13.56	0.14
1926	1,005.3	33.09785552	-103.57555762	13.67	-0.05	14.02	0.16
1927	1,005.8	33.09784911	-103.57556012	14.26	-0.04	13.91	0.16
1928	1,006.3	33.09784328	-103.57556271	13.56	-0.06	13.24	0.16
1929	1,006.8	33.09783731	-103.57556539	13.59	-0.03	13.59	0.17
1930	1,007.3	33.09783139	-103.57556817	13.20	-0.04	13.75	0.16
1931	1,007.9	33.09782591	-103.57557084	9.96	0.03	12.46	0.24
1932	1,008.4	33.09782126	-103.57557325	13.36	-0.04	13.87	0.22
1933	1,008.9	33.09781798	-103.57557579	14.14	-0.02	14.06	0.32
1934	1,009.4	33.09781649	-103.57557850	16.76	0.05	14.84	0.52
1935	1,010.0	33.09781582	-103.57558014	17.70	0.19	15.16	0.72
1936	1,010.5	33.09781594	-103.57558077	18.63	0.23	13.71	0.74
1937	1,011.0	33.09781611	-103.57558103	19.06	0.23	13.56	0.76
1938	1,011.5	33.09781631	-103.57558105	19.77	0.25	14.14	0.77
1939	1,012.0	33.09781650	-103.57558100	19.57	0.30	13.44	0.82
1940	1,012.6	33.09781669	-103.57558092	19.10	0.40	13.52	0.80
1941	1,013.1	33.09781682	-103.57558081	19.26	0.42	13.05	0.81
1942	1,013.6	33.09781694	-103.57558069	19.10	0.35	13.40	0.81
1943	1,014.1	33.09781698	-103.57558099	19.34	0.28	13.83	0.77
1944	1,014.7	33.09781700	-103.57558137	19.38	0.25	13.95	0.75
1945	1,015.2	33.09781701	-103.57558140	19.22	0.24	13.59	0.74
1946	1,015.7	33.09781702	-103.57558140	19.30	0.24	13.67	0.74
1947	1,016.2	33.09781713	-103.57558143	19.45	0.24	13.63	0.75
1948	1,016.7	33.09781722	-103.57558146	19.49	0.24	13.95	0.75
1949	1,017.3	33.09781719	-103.57558138	19.73	0.25	14.18	0.75
1950	1,017.8	33.09781721	-103.57558135	19.65	0.25	13.91	0.76
1951	1,018.3	33.09781743	-103.57558151	19.61	0.24	13.91	0.77
1952	1,018.8	33.09781756	-103.57558160	19.45	0.24	13.56	0.75
1953	1,019.4	33.09781751	-103.57558155	19.41	0.25	13.44	0.77
1954	1,019.9	33.09781748	-103.57558153	19.69	0.24	13.40	0.75
1955	1,020.4	33.09781751	-103.57558157	19.41	0.25	13.48	0.75
1956	1,020.9	33.09781757	-103.57558161	19.77	0.25	13.71	0.78
1957	1,021.4	33.09781767	-103.57558164	19.45	0.26	13.59	0.78
1958	1,022.0	33.09781775	-103.57558163	19.73	0.26	14.45	0.78
1959	1,022.5	33.09781779	-103.57558158	19.49	0.26	13.95	0.80
1960	1,023.0	33.09781785	-103.57558157	19.73	0.27	13.71	0.78
1961	1,023.5	33.09781791	-103.57558158	19.69	0.27	13.71	0.80
1962	1,024.1	33.09781791	-103.57558155	19.69	0.27	13.91	0.78
1963	1,024.6	33.09781788	-103.57558149	19.81	0.27	13.91	0.79
1964	1,025.1	33.09781789	-103.57558153	20.00	0.28	13.83	0.77
1965	1,025.6	33.09781790	-103.57558160	19.81	0.27	13.09	0.78
1966	1,026.1	33.09781794	-103.57558160	19.69	0.28	13.59	0.79
1967	1,026.7	33.09781798	-103.57558158	19.69	0.28	13.83	0.80
1968	1,027.2	33.09781800	-103.57558164	19.73	0.28	14.10	0.80
1969	1,027.7	33.09781802	-103.57558169	19.69	0.27	14.02	0.79
1970	1,028.2	33.09781802	-103.57558168	19.34	0.28	13.48	0.78
1971	1,028.8	33.09781801	-103.57558168	19.61	0.28	13.36	0.78
1972	1,029.3	33.09781789	-103.57558176	19.84	0.28	13.79	0.80
1973	1,029.8	33.09781768	-103.57558169	19.73	0.27	13.63	0.78
1974	1,030.3	33.09781713	-103.57558104	19.45	0.25	13.67	0.79
1975	1,030.8	33.09781651	-103.57558078	15.00	0.24	14.34	0.74
1976	1,031.4	33.09781577	-103.57558142	12.27	0.16	13.09	0.45
1977	1,031.9	33.09781554	-103.57558377	11.72	0.13	12.77	0.33
1978	1,032.4	33.09781611	-103.57558884	8.71	0.10	11.99	0.22
1979	1,032.9	33.09781843	-103.57559358	11.41	0.04	12.62	0.17
1980	1,033.5	33.09782272	-103.57559793	10.55	0.05	14.02	0.19
1981	1,034.0	33.09782792	-103.57560033	13.20	0.00	14.10	0.20
1982	1,034.5	33.09783387	-103.57560116	12.11	0.02	13.71	0.21
1983	1,035.0	33.09784018	-103.57560099	13.36	-0.01	12.97	0.20
1984	1,035.5	33.09784670	-103.57560025	11.60	0.02	13.87	0.22

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1985	1,036.1	33.09785334	-103.57559909	14.61	-0.04	13.52	0.17
1986	1,036.6	33.09786004	-103.57559778	12.50	0.02	13.28	0.23
1987	1,037.1	33.09786642	-103.57559628	13.67	-0.02	12.77	0.20
1988	1,037.6	33.09787276	-103.57559472	11.72	0.03	13.44	0.22
1989	1,038.1	33.09787922	-103.57559321	13.28	-0.02	13.56	0.18
1990	1,038.7	33.09788569	-103.57559171	10.86	0.02	12.54	0.18
1991	1,039.2	33.09789246	-103.57558978	12.93	-0.01	13.16	0.21
1992	1,039.7	33.09789926	-103.57558781	12.11	0.03	13.67	0.23
1993	1,040.2	33.09790606	-103.57558553	13.91	-0.01	14.18	0.19
1994	1,040.8	33.09791282	-103.57558336	12.97	0.00	14.18	0.20
1995	1,041.3	33.09791937	-103.57558180	13.16	-0.04	13.98	0.20
1996	1,041.8	33.09792594	-103.57558012	11.33	0.00	14.26	0.21
1997	1,042.3	33.09793244	-103.57557809	14.73	-0.04	15.23	0.18
1998	1,042.9	33.09793895	-103.57557610	11.60	0.02	13.75	0.22
1999	1,043.4	33.09794540	-103.57557417	15.23	-0.04	14.96	0.18
2000	1,043.9	33.09795190	-103.57557213	12.54	0.02	14.84	0.23
2001	1,044.4	33.09795847	-103.57556993	16.25	-0.03	15.86	0.18
2002	1,044.9	33.09796489	-103.57556783	13.40	0.01	15.63	0.21
2003	1,045.5	33.09797115	-103.57556584	15.20	-0.05	16.56	0.17
2004	1,046.0	33.09797694	-103.57556396	14.45	-0.03	15.63	0.19
2005	1,046.5	33.09798236	-103.57556215	14.02	-0.04	16.48	0.20
2006	1,047.0	33.09798837	-103.57556063	14.18	-0.08	17.19	0.16
2007	1,047.6	33.09799469	-103.57555925	16.56	-0.09	18.83	0.14
2008	1,048.1	33.09800119	-103.57555761	16.88	-0.04	19.10	0.20
2009	1,048.6	33.09800774	-103.57555587	19.26	-0.07	19.06	0.17
2010	1,049.1	33.09801415	-103.57555412	17.19	-0.03	18.87	0.23
2011	1,049.6	33.09802054	-103.57555237	20.08	-0.08	19.41	0.23
2012	1,050.2	33.09802693	-103.57555048	17.27	-0.02	19.02	0.27
2013	1,050.7	33.09803334	-103.57554857	18.87	-0.09	20.31	0.23
2014	1,051.2	33.09803936	-103.57554645	18.63	-0.05	21.02	0.26
2015	1,051.7	33.09804542	-103.57554432	20.94	-0.07	21.45	0.23
2016	1,052.3	33.09805193	-103.57554206	23.01	-0.07	24.38	0.27
2017	1,052.8	33.09805854	-103.57553985	29.22	-0.12	27.11	0.26
2018	1,053.3	33.09806496	-103.57553807	29.18	-0.08	29.77	0.32
2019	1,053.8	33.09807145	-103.57553635	33.20	-0.11	32.38	0.28
2020	1,054.3	33.09807788	-103.57553490	32.11	-0.06	34.10	0.28
2021	1,054.9	33.09808437	-103.57553346	39.65	-0.13	36.52	0.20
2022	1,055.4	33.09809100	-103.57553203	38.24	-0.07	40.00	0.23
2023	1,055.9	33.09809756	-103.57553059	48.52	-0.14	45.98	0.23
2024	1,056.4	33.09810405	-103.57552915	55.66	-0.08	55.63	0.31
2025	1,056.9	33.09811064	-103.57552762	73.48	-0.18	65.43	0.22
2026	1,057.5	33.09811736	-103.57552597	81.17	-0.17	75.35	0.25
2027	1,058.0	33.09812400	-103.57552397	105.90	-0.18	83.24	0.16
2028	1,058.5	33.09813058	-103.57552173	101.02	-0.07	84.96	0.24
2029	1,059.0	33.09813716	-103.57551948	106.52	-0.15	91.02	0.16
2030	1,059.6	33.09814376	-103.57551722	103.52	-0.05	106.88	0.26
2031	1,060.1	33.09815031	-103.57551519	106.56	-0.11	102.97	0.23
2032	1,060.6	33.09815681	-103.57551322	105.66	-0.03	99.65	0.29
2033	1,061.1	33.09816318	-103.57551135	105.16	-0.10	104.45	0.25
2034	1,061.6	33.09816954	-103.57550948	100.94	-0.04	102.81	0.30
2035	1,062.2	33.09817591	-103.57550767	116.25	-0.16	110.94	0.23
2036	1,062.7	33.09818228	-103.57550584	121.88	-0.04	118.91	0.35
2037	1,063.2	33.09818832	-103.57550365	135.74	-0.11	124.81	0.35
2038	1,063.7	33.09819437	-103.57550145	140.74	-0.03	134.77	0.48
2039	1,064.3	33.09820046	-103.57549913	154.81	0.31	134.26	0.28
2040	1,064.8	33.09820658	-103.57549685	156.84	0.04	131.09	0.46
2041	1,065.3	33.09821275	-103.57549477	164.61	-0.10	152.62	0.36
2042	1,065.8	33.09821888	-103.57549269	126.76	0.24	152.34	0.84
2043	1,066.4	33.09822484	-103.57549064	161.29	-0.11	147.58	0.32
2044	1,066.9	33.09823017	-103.57548795	161.56	0.05	148.52	0.48
2045	1,067.4	33.09823441	-103.57548412	164.34	-0.01	151.80	0.56
2046	1,067.9	33.09823810	-103.57548039	157.31	0.05	145.63	0.58

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2047	1,068.4	33.09824113	-103.57547679	139.26	0.05	140.20	0.59
2048	1,069.0	33.09824422	-103.57547342	147.81	-0.12	147.58	0.49
2049	1,069.5	33.09824734	-103.57547029	149.73	-0.06	161.56	0.91
2050	1,070.0	33.09825047	-103.57546845	148.24	-0.04	162.62	1.13
2051	1,070.5	33.09825362	-103.57546742	144.77	0.07	172.11	1.18
2052	1,071.0	33.09825465	-103.57546905	145.27	0.07	174.26	1.23
2053	1,071.6	33.09825476	-103.57547183	134.92	0.03	162.66	0.93
2054	1,072.1	33.09825688	-103.57547522	137.81	-0.03	157.73	0.56
2055	1,072.6	33.09825953	-103.57547878	143.75	-0.01	151.45	0.49
2056	1,073.1	33.09826353	-103.57548037	138.83	-0.02	143.48	0.49
2057	1,073.7	33.09826775	-103.57548168	137.07	-0.02	140.86	0.56
2058	1,074.2	33.09827254	-103.57548132	153.44	-0.05	176.88	0.52
2059	1,074.7	33.09827734	-103.57548088	153.91	0.00	203.13	0.52
2060	1,075.2	33.09828175	-103.57548000	127.62	0.00	156.25	0.55
2061	1,075.7	33.09828605	-103.57547901	140.27	0.07	139.22	0.63
2062	1,076.3	33.09828963	-103.57547722	156.52	-0.02	155.70	0.63
2063	1,076.8	33.09829307	-103.57547543	155.98	0.05	168.13	0.59
2064	1,077.3	33.09829595	-103.57547366	166.60	0.00	173.59	0.60
2065	1,077.8	33.09829905	-103.57547198	166.52	-0.04	180.00	0.62
2066	1,078.4	33.09830247	-103.57547063	153.83	0.03	173.01	0.73
2067	1,078.9	33.09830563	-103.57546961	144.22	-0.01	166.41	0.74
2068	1,079.4	33.09830832	-103.57546916	139.26	0.03	172.38	0.76
2069	1,079.9	33.09831042	-103.57546881	135.16	0.05	177.70	0.75
2070	1,080.5	33.09831185	-103.57546858	131.45	0.04	177.46	0.76
2071	1,081.0	33.09831221	-103.57546860	130.63	0.07	173.28	0.79
2072	1,081.5	33.09831170	-103.57546882	134.61	0.05	174.38	0.77
2073	1,082.0	33.09831163	-103.57546822	134.96	0.05	176.60	0.77
2074	1,082.5	33.09831180	-103.57546715	135.08	0.03	174.73	0.75
2075	1,083.1	33.09831204	-103.57546353	137.70	0.03	166.99	0.74
2076	1,083.6	33.09831230	-103.57545894	133.87	0.07	168.56	0.86
2077	1,084.1	33.09831138	-103.57545211	209.18	0.68	225.78	2.68
2078	1,084.6	33.09831018	-103.57544474	-25.82	-5.61	-9.88	-7.56
2079	1,085.1	33.09831015	-103.57543833	132.54	-0.56	99.34	-3.79
2080	1,085.7	33.09831026	-103.57543201	127.70	-0.03	159.69	0.31
2081	1,086.2	33.09830985	-103.57542876	141.56	-0.03	160.04	0.63
2082	1,086.7	33.09830974	-103.57542573	141.72	0.07	165.78	0.62
2083	1,087.2	33.09831421	-103.57542350	135.94	-0.01	144.88	0.57
2084	1,087.8	33.09831896	-103.57542137	144.92	-0.04	163.13	0.59
2085	1,088.3	33.09832528	-103.57541975	142.81	-0.04	151.33	0.55
2086	1,088.8	33.09833157	-103.57541817	160.86	-0.05	158.32	0.57
2087	1,089.3	33.09833787	-103.57541668	157.85	-0.07	161.48	0.54
2088	1,089.9	33.09834418	-103.57541521	161.60	-0.11	172.62	0.49
2089	1,090.4	33.09835053	-103.57541377	141.64	-0.07	154.10	0.50
2090	1,090.9	33.09835688	-103.57541215	126.91	-0.09	146.33	0.50
2091	1,091.4	33.09836325	-103.57541021	116.17	-0.09	128.48	0.48
2092	1,091.9	33.09836937	-103.57540818	101.80	-0.15	113.20	0.36
2093	1,092.5	33.09837526	-103.57540605	79.69	-0.03	100.86	0.45
2094	1,093.0	33.09838147	-103.57540356	69.73	-0.09	90.78	0.44
2095	1,093.5	33.09838793	-103.57540079	55.74	-0.02	82.42	0.50
2096	1,094.0	33.09839418	-103.57539836	54.49	-0.10	74.41	0.43
2097	1,094.6	33.09840031	-103.57539610	49.81	-0.02	65.78	0.47
2098	1,095.1	33.09840662	-103.57539378	75.66	0.09	88.36	1.05
2099	1,095.6	33.09841300	-103.57539143	68.20	0.10	101.52	1.29
2100	1,096.1	33.09841928	-103.57538930	76.45	-0.17	91.99	0.36
2101	1,096.6	33.09842557	-103.57538720	83.56	-0.21	100.08	0.16
2102	1,097.2	33.09843226	-103.57538501	67.54	-0.22	82.77	0.07
2103	1,097.7	33.09843900	-103.57538281	48.48	-0.11	67.81	-0.03
2104	1,098.2	33.09844543	-103.57538023	43.13	-0.10	59.22	0.06
2105	1,098.7	33.09845182	-103.57537765	35.63	0.01	51.64	0.28
2106	1,099.2	33.09845808	-103.57537504	36.95	-0.07	48.44	0.27
2107	1,099.8	33.09846443	-103.57537239	31.29	-0.03	45.39	0.33
2108	1,100.3	33.09847044	-103.57536985	32.34	-0.04	42.77	0.33

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2109	1,100.8	33.09847661	-103.57536722	29.61	-0.02	40.12	0.34
2110	1,101.3	33.09848296	-103.57536442	33.98	-0.10	40.20	0.27
2111	1,101.9	33.09848930	-103.57536155	28.98	-0.04	39.73	0.29
2112	1,102.4	33.09849560	-103.57535855	33.59	-0.09	39.84	0.27
2113	1,102.9	33.09850191	-103.57535562	31.33	-0.04	40.16	0.31
2114	1,103.4	33.09850815	-103.57535281	37.27	-0.07	43.91	0.26
2115	1,103.9	33.09851447	-103.57535005	39.65	-0.04	41.80	0.29
2116	1,104.5	33.09852083	-103.57534737	43.75	-0.08	40.98	0.28
2117	1,105.0	33.09852722	-103.57534466	37.93	-0.05	44.06	0.31
2118	1,105.5	33.09853357	-103.57534196	37.46	-0.04	46.41	0.28
2119	1,106.0	33.09853977	-103.57533927	37.42	-0.06	47.38	0.28
2120	1,106.6	33.09854586	-103.57533660	40.39	-0.07	44.34	0.26
2121	1,107.1	33.09855218	-103.57533396	42.77	-0.06	42.11	0.26
2122	1,107.6	33.09855856	-103.57533132	38.71	-0.06	37.58	0.25
2123	1,108.1	33.09856484	-103.57532883	31.95	-0.05	39.41	0.26
2124	1,108.6	33.09857108	-103.57532636	28.98	-0.04	38.36	0.27
2125	1,109.2	33.09857722	-103.57532355	28.09	-0.07	35.08	0.26
2126	1,109.7	33.09858336	-103.57532070	27.70	-0.05	33.75	0.25
2127	1,110.2	33.09858944	-103.57531789	25.16	-0.06	31.91	0.26
2128	1,110.7	33.09859556	-103.57531510	26.02	-0.04	32.38	0.24
2129	1,111.3	33.09860204	-103.57531249	28.01	-0.07	33.36	0.25
2130	1,111.8	33.09860851	-103.57530986	31.60	-0.10	34.41	0.22
2131	1,112.3	33.09861476	-103.57530719	30.70	-0.09	35.55	0.24
2132	1,112.8	33.09862102	-103.57530453	31.37	-0.06	35.39	0.21
2133	1,113.3	33.09862738	-103.57530187	31.09	-0.07	35.94	0.23
2134	1,113.9	33.09863368	-103.57529929	37.15	-0.12	37.54	0.17
2135	1,114.4	33.09863991	-103.57529684	31.48	-0.08	34.88	0.22
2136	1,114.9	33.09864623	-103.57529457	29.61	-0.08	31.76	0.24
2137	1,115.4	33.09865270	-103.57529249	25.94	-0.09	28.52	0.23
2138	1,116.0	33.09865895	-103.57529056	21.80	-0.02	27.31	0.23
2139	1,116.5	33.09866501	-103.57528877	22.31	-0.08	26.09	0.25
2140	1,117.0	33.09867131	-103.57528690	22.62	-0.08	25.78	0.24
2141	1,117.5	33.09867780	-103.57528497	23.32	-0.10	24.65	0.31
2142	1,118.0	33.09868405	-103.57528320	23.05	-0.06	23.75	0.36
2143	1,118.6	33.09869019	-103.57528152	25.74	-0.10	23.28	0.40
2144	1,119.1	33.09869602	-103.57528035	27.42	-0.08	25.90	0.41
2145	1,119.6	33.09870177	-103.57527933	25.90	-0.01	26.72	0.56
2146	1,120.1	33.09870761	-103.57527925	32.11	-0.12	26.99	0.47
2147	1,120.7	33.09871347	-103.57527931	27.93	-0.01	26.72	0.59
2148	1,121.2	33.09871918	-103.57528049	33.44	-0.06	28.20	0.66
2149	1,121.7	33.09872484	-103.57528180	32.38	-0.02	29.34	0.73
2150	1,122.2	33.09872896	-103.57528492	36.88	-0.12	32.42	0.58
2151	1,122.7	33.09873258	-103.57528822	35.35	-0.09	31.48	0.47
2152	1,123.3	33.09873267	-103.57529275	31.60	-0.11	31.68	0.39
2153	1,123.8	33.09873198	-103.57529690	31.91	-0.07	32.58	0.39
2154	1,124.3	33.09872839	-103.57529965	27.15	-0.06	29.06	0.39
2155	1,124.8	33.09872415	-103.57530263	28.63	-0.09	28.95	0.38
2156	1,125.4	33.09871863	-103.57530593	25.59	-0.04	27.38	0.41
2157	1,125.9	33.09871304	-103.57530933	28.67	-0.11	27.19	0.34
2158	1,126.4	33.09870745	-103.57531281	24.06	-0.06	26.68	0.38
2159	1,126.9	33.09870189	-103.57531620	28.44	-0.11	27.34	0.30
2160	1,127.4	33.09869635	-103.57531949	26.88	-0.07	27.73	0.34
2161	1,128.0	33.09869072	-103.57532274	30.39	-0.08	30.31	0.35
2162	1,128.5	33.09868501	-103.57532597	36.88	-0.09	35.16	0.35
2163	1,129.0	33.09867927	-103.57532904	39.53	-0.06	39.84	0.33
2164	1,129.5	33.09867348	-103.57533206	55.43	-0.18	45.74	0.20
2165	1,130.1	33.09866733	-103.57533436	56.33	-0.07	48.87	0.31
2166	1,130.6	33.09866103	-103.57533638	69.26	-0.13	54.77	0.25
2167	1,131.1	33.09865501	-103.57533849	66.13	-0.05	56.72	0.30
2168	1,131.6	33.09864906	-103.57534062	73.28	-0.14	60.39	0.23
2169	1,132.1	33.09864287	-103.57534301	66.17	-0.06	57.81	0.29
2170	1,132.7	33.09863666	-103.57534544	69.81	-0.15	62.19	0.22

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2171	1,133.2	33.09863058	-103.57534773	62.11	-0.06	60.90	0.30
2172	1,133.7	33.09862452	-103.57535003	62.97	-0.11	55.51	0.26
2173	1,134.2	33.09861888	-103.57535251	62.54	-0.05	54.38	0.33
2174	1,134.8	33.09861324	-103.57535503	63.32	-0.08	55.66	0.31
2175	1,135.3	33.09860755	-103.57535777	63.09	-0.04	54.65	0.33
2176	1,135.8	33.09860180	-103.57536051	65.90	-0.07	55.04	0.31
2177	1,136.3	33.09859580	-103.57536323	63.09	-0.05	52.19	0.34
2178	1,136.8	33.09858980	-103.57536574	56.37	-0.05	50.00	0.39
2179	1,137.4	33.09858390	-103.57536774	50.94	-0.03	51.52	0.40
2180	1,137.9	33.09857790	-103.57536990	44.65	-0.04	53.71	0.43
2181	1,138.4	33.09857182	-103.57537227	48.52	-0.02	57.07	0.47
2182	1,138.9	33.09856581	-103.57537466	50.90	-0.02	61.25	0.51
2183	1,139.5	33.09855987	-103.57537706	54.96	-0.02	65.74	0.56
2184	1,140.0	33.09855448	-103.57537927	52.11	0.03	71.41	0.69
2185	1,140.5	33.09854952	-103.57538131	50.94	0.12	74.96	0.84
2186	1,141.0	33.09854432	-103.57538300	55.31	0.07	78.20	0.93
2187	1,141.5	33.09853903	-103.57538449	59.69	0.02	81.33	1.01
2188	1,142.1	33.09853349	-103.57538597	56.45	0.11	89.14	1.23
2189	1,142.6	33.09852787	-103.57538744	64.41	0.06	94.02	1.31
2190	1,143.1	33.09852201	-103.57538909	64.88	0.14	101.06	1.55
2191	1,143.6	33.09851612	-103.57539077	75.66	0.11	112.58	1.73
2192	1,144.2	33.09851028	-103.57539250	77.81	0.21	118.95	2.09
2193	1,144.7	33.09850444	-103.57539424	95.98	0.15	133.20	2.35
2194	1,145.2	33.09849842	-103.57539588	91.64	0.31	140.39	2.65
2195	1,145.7	33.09849241	-103.57539755	101.41	0.24	148.05	2.74
2196	1,146.2	33.09848660	-103.57539964	108.52	0.49	168.32	3.49
2197	1,146.8	33.09848060	-103.57540162	126.88	0.59	188.05	4.14
2198	1,147.3	33.09847483	-103.57540278	124.30	0.72	194.02	4.43
2199	1,147.8	33.09846882	-103.57540391	115.16	0.55	184.38	3.98
2200	1,148.3	33.09846263	-103.57540482	98.05	0.39	163.52	3.19
2201	1,148.9	33.09845689	-103.57540529	87.54	0.19	144.14	2.47
2202	1,149.4	33.09845197	-103.57540486	77.34	0.11	125.16	1.78
2203	1,149.9	33.09844727	-103.57540390	74.10	0.10	112.46	1.44
2204	1,150.4	33.09844289	-103.57540219	95.23	0.26	124.41	2.08
2205	1,150.9	33.09843926	-103.57540045	127.38	0.50	154.84	3.33
2206	1,151.5	33.09843635	-103.57539867	165.86	0.86	212.50	5.70
2207	1,152.0	33.09843434	-103.57539715	198.67	1.17	273.13	7.64
2208	1,152.5	33.09843295	-103.57539582	212.50	1.09	305.31	8.22
2209	1,153.0	33.09843230	-103.57539588	220.78	1.10	330.27	8.57
2210	1,153.6	33.09843201	-103.57539661	205.35	1.08	323.32	8.35
2211	1,154.1	33.09843145	-103.57539748	181.76	0.90	301.84	7.93
2212	1,154.6	33.09843080	-103.57539839	165.04	0.82	299.49	8.05
2213	1,155.1	33.09843075	-103.57539857	167.93	0.89	307.81	8.46
2214	1,155.6	33.09843080	-103.57539862	173.48	0.91	305.90	8.37
2215	1,156.2	33.09842910	-103.57539943	170.27	0.78	281.09	7.17
2216	1,156.7	33.09842723	-103.57540029	148.71	0.41	236.91	4.74
2217	1,157.2	33.09842356	-103.57540074	113.24	0.21	184.77	2.79
2218	1,157.7	33.09841981	-103.57540117	93.28	0.15	140.74	1.81
2219	1,158.3	33.09841538	-103.57540146	97.85	0.29	128.71	1.92
2220	1,158.8	33.09841094	-103.57540191	104.49	0.38	136.48	2.57
2221	1,159.3	33.09840640	-103.57540310	82.81	0.28	129.49	2.64
2222	1,159.8	33.09840192	-103.57540442	55.47	0.15	94.96	1.81
2223	1,160.3	33.09839761	-103.57540610	47.89	0.02	75.04	1.17
2224	1,160.9	33.09839326	-103.57540789	44.26	0.01	68.36	0.79
2225	1,161.4	33.09838881	-103.57540987	43.75	0.01	69.22	0.69
2226	1,161.9	33.09838502	-103.57541326	49.38	0.00	71.91	0.65
2227	1,162.4	33.09838205	-103.57541843	50.86	0.07	76.76	0.77
2228	1,163.0	33.09838038	-103.57542442	78.98	0.26	104.53	1.52
2229	1,163.5	33.09837986	-103.57543118	-149.57	-4.63	-21.80	-6.81
2230	1,164.0	33.09837980	-103.57543734	29.81	-1.48	-119.45	-9.99
2231	1,164.5	33.09838003	-103.57544316	54.45	-0.15	80.66	-0.15
2232	1,165.0	33.09837802	-103.57544851	52.31	-0.03	85.78	0.58

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2233	1,165.6	33.09837500	-103.57545368	57.11	-0.04	84.06	0.51
2234	1,166.1	33.09837052	-103.57545725	62.50	0.00	88.13	0.50
2235	1,166.6	33.09836564	-103.57546035	73.67	-0.05	90.08	0.45
2236	1,167.1	33.09836017	-103.57546222	82.38	-0.02	96.45	0.52
2237	1,167.7	33.09835461	-103.57546388	87.38	-0.04	107.85	0.48
2238	1,168.2	33.09834863	-103.57546545	95.78	0.01	115.12	0.51
2239	1,168.7	33.09834262	-103.57546705	100.78	-0.03	116.95	0.47
2240	1,169.2	33.09833661	-103.57546976	108.32	0.01	119.10	0.48
2241	1,169.7	33.09833076	-103.57547246	111.91	-0.04	125.86	0.44
2242	1,170.3	33.09832619	-103.57547500	104.92	0.06	113.79	0.43
2243	1,170.8	33.09832166	-103.57547752	104.84	-0.03	128.01	0.27
2244	1,171.3	33.09831729	-103.57547991	110.55	-0.01	142.15	0.41
2245	1,171.8	33.09831230	-103.57548234	138.83	-0.08	139.57	0.42
2246	1,172.4	33.09830612	-103.57548471	152.73	0.01	147.38	0.50
2247	1,172.9	33.09829987	-103.57548697	150.51	-0.01	152.66	0.54
2248	1,173.4	33.09829364	-103.57548900	156.37	0.04	185.00	0.60
2249	1,173.9	33.09828746	-103.57549115	150.66	0.01	162.89	0.57
2250	1,174.4	33.09828136	-103.57549344	160.23	0.01	169.73	0.55
2251	1,175.0	33.09827525	-103.57549624	142.50	0.00	161.33	0.52
2252	1,175.5	33.09826917	-103.57549945	133.32	0.01	139.10	0.50
2253	1,176.0	33.09826310	-103.57550291	115.55	-0.01	135.00	0.50
2254	1,176.5	33.09825705	-103.57550650	97.50	-0.01	117.70	0.53
2255	1,177.1	33.09825106	-103.57550986	86.68	-0.03	113.09	0.50
2256	1,177.6	33.09824512	-103.57551311	81.60	0.01	116.64	0.47
2257	1,178.1	33.09823929	-103.57551621	81.29	-0.02	116.99	0.45
2258	1,178.6	33.09823350	-103.57551926	95.70	0.00	125.66	0.45
2259	1,179.1	33.09822739	-103.57552194	119.65	-0.06	126.09	0.46
2260	1,179.7	33.09822124	-103.57552457	131.91	-0.01	117.54	0.52
2261	1,180.2	33.09821508	-103.57552685	139.61	-0.02	135.70	0.50
2262	1,180.7	33.09820892	-103.57552912	139.77	-0.02	138.71	0.51
2263	1,181.2	33.09820233	-103.57553143	146.02	-0.07	152.19	0.48
2264	1,181.8	33.09819575	-103.57553373	150.08	-0.03	161.88	0.47
2265	1,182.3	33.09818936	-103.57553592	140.12	-0.01	152.66	0.47
2266	1,182.8	33.09818294	-103.57553821	136.80	-0.02	131.29	0.46
2267	1,183.3	33.09817641	-103.57554088	143.44	-0.07	139.22	0.39
2268	1,183.8	33.09816986	-103.57554362	141.45	-0.04	135.98	0.37
2269	1,184.4	33.09816335	-103.57554647	135.51	-0.06	125.59	0.32
2270	1,184.9	33.09815693	-103.57554934	124.45	-0.01	134.81	0.34
2271	1,185.4	33.09815060	-103.57555226	122.50	-0.08	131.45	0.24
2272	1,185.9	33.09814413	-103.57555494	115.35	-0.03	105.74	0.27
2273	1,186.5	33.09813752	-103.57555735	103.09	-0.09	89.73	0.23
2274	1,187.0	33.09813094	-103.57555962	79.65	-0.03	77.38	0.26
2275	1,187.5	33.09812436	-103.57556181	65.20	-0.07	64.53	0.22
2276	1,188.0	33.09811813	-103.57556419	47.34	-0.03	50.70	0.26
2277	1,188.5	33.09811207	-103.57556668	40.55	-0.08	43.56	0.21
2278	1,189.1	33.09810605	-103.57556926	29.14	-0.03	36.80	0.25
2279	1,189.6	33.09810001	-103.57557187	25.90	-0.02	32.73	0.22
2280	1,190.1	33.09809397	-103.57557435	22.19	-0.02	28.40	0.22
2281	1,190.6	33.09808795	-103.57557680	24.77	-0.06	27.54	0.22
2282	1,191.2	33.09808223	-103.57557904	24.18	-0.04	27.50	0.26
2283	1,191.7	33.09807655	-103.57558125	24.53	-0.07	26.25	0.24
2284	1,192.2	33.09807042	-103.57558402	22.62	-0.02	25.43	0.25
2285	1,192.7	33.09806428	-103.57558682	23.75	-0.07	25.12	0.26
2286	1,193.2	33.09805825	-103.57558988	21.60	-0.01	24.02	0.28
2287	1,193.8	33.09805226	-103.57559283	21.99	-0.07	21.52	0.27
2288	1,194.3	33.09804671	-103.57559517	19.14	-0.02	21.02	0.30
2289	1,194.8	33.09804093	-103.57559760	19.65	-0.08	20.39	0.29
2290	1,195.3	33.09803451	-103.57560031	18.67	-0.05	21.33	0.25
2291	1,195.9	33.09802825	-103.57560302	18.09	-0.04	20.51	0.27
2292	1,196.4	33.09802225	-103.57560575	18.83	-0.01	20.08	0.31
2293	1,196.9	33.09801645	-103.57560865	19.81	-0.03	21.02	0.31
2294	1,197.4	33.09801099	-103.57561177	22.07	-0.06	22.50	0.27

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2295	1,197.9	33.09800551	-103.57561486	20.98	-0.03	23.28	0.33
2296	1,198.5	33.09800001	-103.57561791	25.94	-0.11	23.48	0.24
2297	1,199.0	33.09799447	-103.57562100	21.33	-0.05	22.23	0.28
2298	1,199.5	33.09798890	-103.57562410	24.34	-0.10	22.19	0.22
2299	1,200.0	33.09798408	-103.57562817	18.32	-0.03	20.35	0.24
2300	1,200.6	33.09797963	-103.57563271	22.15	-0.13	19.96	0.12
2301	1,201.1	33.09797644	-103.57563943	15.63	-0.01	16.68	0.21
2302	1,201.6	33.09797364	-103.57564686	15.78	-0.04	16.72	0.23
2303	1,202.1	33.09797526	-103.57565307	14.10	0.00	15.63	0.28
2304	1,202.6	33.09797771	-103.57565906	18.52	-0.08	15.98	0.24
2305	1,203.2	33.09798314	-103.57566211	14.34	-0.02	15.51	0.25
2306	1,203.7	33.09798882	-103.57566488	17.31	-0.07	16.48	0.24
2307	1,204.2	33.09799509	-103.57566372	18.44	-0.04	16.64	0.31
2308	1,204.7	33.09800134	-103.57566243	21.52	-0.10	17.81	0.31
2309	1,205.3	33.09800765	-103.57565991	24.38	-0.10	20.39	0.35
2310	1,205.8	33.09801397	-103.57565745	24.38	-0.10	22.19	0.36
2311	1,206.3	33.09802007	-103.57565537	27.85	-0.08	24.10	0.32
2312	1,206.8	33.09802654	-103.57565318	27.93	-0.14	26.72	0.31
2313	1,207.3	33.09803391	-103.57565075	25.90	-0.09	27.42	0.28
2314	1,207.9	33.09804083	-103.57564829	27.77	-0.10	28.01	0.31
2315	1,208.4	33.09804695	-103.57564578	27.66	-0.09	26.84	0.34
2316	1,208.9	33.09805320	-103.57564332	26.33	-0.11	26.64	0.31
2317	1,209.4	33.09805961	-103.57564095	25.78	-0.05	28.40	0.30
2318	1,210.0	33.09806609	-103.57563847	27.50	-0.11	27.11	0.26
2319	1,210.5	33.09807259	-103.57563592	22.07	-0.06	25.94	0.30
2320	1,211.0	33.09807904	-103.57563336	23.48	-0.08	25.08	0.30
2321	1,211.5	33.09808545	-103.57563080	21.68	-0.02	23.83	0.32
2322	1,212.0	33.09809155	-103.57562829	27.23	-0.10	26.02	0.27
2323	1,212.6	33.09809748	-103.57562582	24.30	-0.04	25.70	0.27
2324	1,213.1	33.09810355	-103.57562335	30.66	-0.12	26.37	0.21
2325	1,213.6	33.09810964	-103.57562088	27.03	-0.05	27.97	0.24
2326	1,214.1	33.09811593	-103.57561835	13.24	-0.44	22.34	-0.93
2327	1,214.7	33.09812226	-103.57561581	-18.91	-1.07	21.99	-0.58
2328	1,215.2	33.09812865	-103.57561335	25.66	-0.26	27.23	-0.75
2329	1,215.7	33.09813501	-103.57561089	34.26	-0.07	38.98	0.05
2330	1,216.2	33.09814121	-103.57560817	46.17	-0.07	49.41	0.10
2331	1,216.7	33.09814740	-103.57560552	55.31	-0.02	59.02	0.21
2332	1,217.3	33.09815363	-103.57560326	74.49	-0.09	68.20	0.19
2333	1,217.8	33.09815987	-103.57560101	90.35	-0.05	91.84	0.27
2334	1,218.3	33.09816608	-103.57559884	113.36	-0.11	113.24	0.20
2335	1,218.8	33.09817235	-103.57559648	130.27	-0.04	134.57	0.26
2336	1,219.4	33.09817837	-103.57559382	165.86	-0.06	175.51	0.26
2337	1,219.9	33.09818451	-103.57559137	-214.65	-0.56	50.35	-0.11
2338	1,220.4	33.09819072	-103.57558931	-14.38	-0.55	49.49	-0.24
2339	1,220.9	33.09819683	-103.57558710	86.95	-0.12	100.27	0.21
2340	1,221.4	33.09820287	-103.57558469	112.93	-0.12	148.16	0.29
2341	1,222.0	33.09820904	-103.57558209	123.67	-0.08	152.93	0.45
2342	1,222.5	33.09821531	-103.57557934	129.65	-0.12	156.33	0.38
2343	1,223.0	33.09822135	-103.57557652	118.28	-0.04	148.40	0.44
2344	1,223.5	33.09822725	-103.57557365	113.79	-0.07	141.72	0.44
2345	1,224.1	33.09823315	-103.57557097	104.22	-0.04	134.38	0.46
2346	1,224.6	33.09823906	-103.57556837	90.12	-0.05	118.01	0.48
2347	1,225.1	33.09824511	-103.57556584	75.00	0.02	105.39	0.51
2348	1,225.6	33.09825122	-103.57556331	70.43	-0.06	98.20	0.47
2349	1,226.1	33.09825731	-103.57556126	62.70	0.01	93.98	0.44
2350	1,226.7	33.09826342	-103.57555927	63.75	-0.03	94.81	0.45
2351	1,227.2	33.09826982	-103.57555723	66.88	0.00	96.68	0.45
2352	1,227.7	33.09827621	-103.57555516	79.02	-0.05	104.14	0.47
2353	1,228.2	33.09828229	-103.57555277	93.16	-0.01	109.96	0.52
2354	1,228.8	33.09828839	-103.57555033	118.83	-0.05	125.55	0.51
2355	1,229.3	33.09829435	-103.57554777	138.91	-0.01	145.63	0.51
2356	1,229.8	33.09830027	-103.57554510	154.10	-0.01	161.17	0.51

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2357	1,230.3	33.09830596	-103.57554208	167.07	0.02	170.98	0.51
2358	1,230.8	33.09831178	-103.57553929	165.63	-0.04	173.01	0.50
2359	1,231.4	33.09831789	-103.57553701	169.06	-0.03	175.43	0.49
2360	1,231.9	33.09832405	-103.57553490	162.62	-0.07	168.40	0.46
2361	1,232.4	33.09833028	-103.57553307	152.03	-0.03	153.56	0.42
2362	1,232.9	33.09833661	-103.57553095	140.08	-0.04	138.71	0.41
2363	1,233.5	33.09834306	-103.57552853	128.71	-0.01	140.86	0.42
2364	1,234.0	33.09834936	-103.57552601	124.53	-0.12	134.96	0.36
2365	1,234.5	33.09835556	-103.57552342	81.56	0.18	121.68	0.55
2366	1,235.0	33.09836199	-103.57552082	87.66	-0.02	116.33	0.45
2367	1,235.5	33.09836857	-103.57551820	83.91	-0.01	105.31	0.37
2368	1,236.1	33.09837495	-103.57551554	78.83	-0.06	104.81	0.37
2369	1,236.6	33.09838124	-103.57551287	73.75	-0.03	101.37	0.35
2370	1,237.1	33.09838725	-103.57551053	71.41	-0.05	96.88	0.34
2371	1,237.6	33.09839319	-103.57550827	74.06	-0.04	98.01	0.40
2372	1,238.2	33.09839914	-103.57550606	78.98	-0.06	97.89	0.36
2373	1,238.7	33.09840507	-103.57550387	82.66	-0.05	98.01	0.34
2374	1,239.2	33.09841127	-103.57550105	90.00	-0.04	98.59	0.37
2375	1,239.7	33.09841746	-103.57549823	85.86	-0.03	95.04	0.40
2376	1,240.2	33.09842345	-103.57549551	86.68	-0.07	91.41	0.33
2377	1,240.8	33.09842937	-103.57549275	73.75	-0.03	84.18	0.38
2378	1,241.3	33.09843509	-103.57548965	70.59	-0.12	75.31	0.29
2379	1,241.8	33.09844076	-103.57548649	53.91	-0.04	66.48	0.35
2380	1,242.3	33.09844621	-103.57548315	40.90	-0.01	57.81	0.34
2381	1,242.9	33.09845173	-103.57547973	35.35	0.00	51.88	0.34
2382	1,243.4	33.09845741	-103.57547614	41.80	-0.14	50.16	0.20
2383	1,243.9	33.09846315	-103.57547276	32.11	-0.03	45.98	0.29
2384	1,244.4	33.09846894	-103.57546969	34.06	-0.06	42.85	0.27
2385	1,244.9	33.09847508	-103.57546704	29.14	-0.01	41.45	0.32
2386	1,245.5	33.09848153	-103.57546482	29.06	-0.02	40.16	0.28
2387	1,246.0	33.09848780	-103.57546287	26.29	0.02	37.66	0.31
2388	1,246.5	33.09849394	-103.57546110	29.06	-0.03	38.01	0.28
2389	1,247.0	33.09850003	-103.57545895	26.06	0.01	37.70	0.31
2390	1,247.6	33.09850608	-103.57545662	28.98	-0.05	38.95	0.28
2391	1,248.1	33.09851229	-103.57545445	26.88	-0.01	39.10	0.31
2392	1,248.6	33.09851854	-103.57545233	31.41	-0.07	40.08	0.26
2393	1,249.1	33.09852482	-103.57544999	27.62	-0.01	39.69	0.33
2394	1,249.6	33.09853108	-103.57544761	37.15	-0.10	43.87	0.23
2395	1,250.2	33.09853717	-103.57544573	34.53	-0.03	46.64	0.32
2396	1,250.7	33.09854323	-103.57544390	41.25	-0.06	44.65	0.34
2397	1,251.2	33.09854949	-103.57544206	47.23	-0.03	50.94	0.35
2398	1,251.7	33.09855575	-103.57544026	53.59	-0.10	55.31	0.29
2399	1,252.3	33.09856214	-103.57543882	46.68	-0.02	51.68	0.37
2400	1,252.8	33.09856859	-103.57543731	43.98	-0.06	51.13	0.33
2401	1,253.3	33.09857508	-103.57543553	36.60	-0.02	48.52	0.37
2402	1,253.8	33.09858173	-103.57543375	37.42	-0.06	48.59	0.33
2403	1,254.3	33.09858860	-103.57543200	31.45	-0.02	46.25	0.38
2404	1,254.9	33.09859521	-103.57542998	31.25	-0.03	44.65	0.40
2405	1,255.4	33.09860134	-103.57542750	30.98	-0.02	43.87	0.44
2406	1,255.9	33.09860749	-103.57542516	35.47	-0.06	45.55	0.43
2407	1,256.4	33.09861360	-103.57542300	32.89	0.02	47.03	0.53
2408	1,257.0	33.09861971	-103.57542099	36.33	0.00	50.94	0.58
2409	1,257.5	33.09862585	-103.57541910	37.77	0.05	57.07	0.75
2410	1,258.0	33.09863214	-103.57541735	44.69	0.03	67.54	0.90
2411	1,258.5	33.09863852	-103.57541568	55.08	0.16	86.88	1.37
2412	1,259.0	33.09864498	-103.57541319	89.30	0.25	126.02	2.22
2413	1,259.6	33.09865149	-103.57541032	237.97	2.05	257.19	6.69
2414	1,260.1	33.09865738	-103.57540582	103.32	0.80	132.93	2.18
2415	1,260.6	33.09866311	-103.57540082	79.26	0.20	115.86	1.86
2416	1,261.1	33.09866937	-103.57539728	85.78	0.01	96.72	1.05
2417	1,261.7	33.09867574	-103.57539397	84.73	-0.01	88.56	0.72
2418	1,262.2	33.09868211	-103.57539180	86.48	-0.07	82.42	0.52

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2419	1,262.7	33.09868849	-103.57538970	79.92	-0.03	78.59	0.46
2420	1,263.2	33.09869502	-103.57538779	80.66	-0.08	74.38	0.37
2421	1,263.7	33.09870153	-103.57538587	68.91	-0.04	63.40	0.40
2422	1,264.3	33.09870780	-103.57538385	46.72	-0.02	47.31	0.40
2423	1,264.8	33.09871397	-103.57538183	34.73	-0.03	42.77	0.42
2424	1,265.3	33.09871956	-103.57537985	35.59	-0.12	38.13	0.33
2425	1,265.8	33.09872469	-103.57537828	24.30	-0.03	29.41	0.44
2426	1,266.4	33.09872866	-103.57537777	22.50	-0.07	25.63	0.42
2427	1,266.9	33.09873167	-103.57537987	18.67	-0.05	23.87	0.44
2428	1,267.4	33.09873300	-103.57538653	27.23	-0.15	26.17	0.28
2429	1,267.9	33.09873386	-103.57539345	21.33	0.00	26.21	0.41
2430	1,268.4	33.09873418	-103.57540070	25.90	-0.09	28.36	0.40
2431	1,269.0	33.09873436	-103.57540799	28.28	-0.02	33.91	0.61
2432	1,269.5	33.09873443	-103.57541534	53.40	0.08	59.81	1.28
2433	1,270.0	33.09873325	-103.57542172	-137.38	-3.05	-46.99	-7.17
2434	1,270.5	33.09873134	-103.57542751	-69.34	-2.85	-154.84	-8.59
2435	1,271.1	33.09872704	-103.57543148	22.58	-0.45	40.43	-0.08
2436	1,271.6	33.09872179	-103.57543470	29.14	-0.12	46.21	0.63
2437	1,272.1	33.09871549	-103.57543702	31.02	-0.04	42.58	0.63
2438	1,272.6	33.09870894	-103.57543909	31.37	-0.05	38.87	0.53
2439	1,273.1	33.09870219	-103.57544096	35.51	-0.04	39.02	0.47
2440	1,273.7	33.09869539	-103.57544281	38.95	-0.07	45.04	0.42
2441	1,274.2	33.09868856	-103.57544456	48.16	-0.05	50.12	0.42
2442	1,274.7	33.09868173	-103.57544628	62.66	-0.06	56.33	0.36
2443	1,275.2	33.09867516	-103.57544764	76.29	-0.05	65.20	0.32
2444	1,275.8	33.09866858	-103.57544905	86.72	-0.08	76.60	0.28
2445	1,276.3	33.09866208	-103.57545084	93.28	-0.06	85.12	0.29
2446	1,276.8	33.09865555	-103.57545264	99.02	-0.07	86.52	0.27
2447	1,277.3	33.09864887	-103.57545447	101.95	-0.06	92.46	0.28
2448	1,277.8	33.09864218	-103.57545622	101.95	-0.08	92.97	0.28
2449	1,278.4	33.09863547	-103.57545774	105.98	-0.05	92.77	0.29
2450	1,278.9	33.09862873	-103.57545943	116.25	-0.09	93.75	0.24
2451	1,279.4	33.09862189	-103.57546137	119.10	-0.06	95.74	0.28
2452	1,279.9	33.09861516	-103.57546336	128.98	-0.14	105.47	0.19
2453	1,280.5	33.09860854	-103.57546541	113.79	-0.06	100.63	0.31
2454	1,281.0	33.09860191	-103.57546726	103.98	-0.11	94.96	0.23
2455	1,281.5	33.09859531	-103.57546893	92.85	-0.04	101.80	0.29
2456	1,282.0	33.09858875	-103.57547080	96.88	-0.09	103.09	0.25
2457	1,282.5	33.09858224	-103.57547277	110.35	-0.04	117.34	0.31
2458	1,283.1	33.09857574	-103.57547501	133.48	-0.09	130.55	0.27
2459	1,283.6	33.09856923	-103.57547736	149.14	-0.04	123.75	0.33
2460	1,284.1	33.09856254	-103.57547944	159.14	-0.10	134.26	0.30
2461	1,284.6	33.09855584	-103.57548146	154.41	-0.03	139.10	0.33
2462	1,285.2	33.09854923	-103.57548374	158.05	-0.08	142.19	0.33
2463	1,285.7	33.09854265	-103.57548604	151.48	-0.04	136.80	0.34
2464	1,286.2	33.09853598	-103.57548775	148.71	-0.09	134.81	0.33
2465	1,286.7	33.09852932	-103.57548948	136.80	-0.05	126.17	0.33
2466	1,287.2	33.09852273	-103.57549173	132.31	-0.07	123.83	0.30
2467	1,287.8	33.09851615	-103.57549393	133.95	-0.05	132.31	0.32
2468	1,288.3	33.09850960	-103.57549596	134.73	-0.06	131.13	0.34
2469	1,288.8	33.09850300	-103.57549807	136.17	-0.05	129.18	0.33
2470	1,289.3	33.09849618	-103.57550046	137.46	-0.06	136.72	0.33
2471	1,289.9	33.09848936	-103.57550302	144.38	-0.04	145.55	0.34
2472	1,290.4	33.09848256	-103.57550592	156.84	-0.06	150.78	0.38
2473	1,290.9	33.09847579	-103.57550871	175.23	-0.05	164.53	0.38
2474	1,291.4	33.09846906	-103.57551136	181.52	-0.05	177.93	0.39
2475	1,291.9	33.09846240	-103.57551368	196.29	-0.03	192.23	0.40
2476	1,292.5	33.09845581	-103.57551569	197.50	-0.07	195.08	0.41
2477	1,293.0	33.09844908	-103.57551764	192.50	-0.03	194.65	0.42
2478	1,293.5	33.09844221	-103.57551957	202.34	-0.12	198.59	0.33
2479	1,294.0	33.09843540	-103.57552173	191.91	-0.05	193.56	0.40
2480	1,294.6	33.09842862	-103.57552401	200.74	-0.14	199.61	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2481	1,295.1	33.09842177	-103.57552612	192.62	-0.04	186.56	0.44
2482	1,295.6	33.09841489	-103.57552818	178.52	-0.08	179.69	0.41
2483	1,296.1	33.09840834	-103.57553026	152.34	-0.03	161.09	0.42
2484	1,296.6	33.09840183	-103.57553237	125.04	-0.09	139.14	0.33
2485	1,297.2	33.09839543	-103.57553441	91.88	-0.02	121.72	0.40
2486	1,297.7	33.09838902	-103.57553645	86.95	-0.13	116.17	0.28
2487	1,298.2	33.09838206	-103.57553880	78.05	-0.02	108.98	0.40
2488	1,298.7	33.09837509	-103.57554117	81.33	-0.06	103.48	0.38
2489	1,299.3	33.09836843	-103.57554361	82.93	-0.01	102.46	0.40
2490	1,299.8	33.09836175	-103.57554603	97.42	-0.09	108.67	0.34
2491	1,300.3	33.09835531	-103.57554820	92.54	-0.01	112.23	0.47
2492	1,300.8	33.09834882	-103.57555036	103.98	-0.05	110.08	0.41
2493	1,301.3	33.09834247	-103.57555237	106.91	-0.01	130.82	0.43
2494	1,301.9	33.09833610	-103.57555416	117.73	-0.06	131.25	0.41
2495	1,302.4	33.09832973	-103.57555551	126.06	-0.02	141.06	0.44
2496	1,302.9	33.09832325	-103.57555688	118.20	-0.03	127.38	0.41
2497	1,303.4	33.09831662	-103.57555828	124.22	-0.03	127.85	0.47
2498	1,304.0	33.09831012	-103.57556013	123.28	-0.10	151.13	0.43
2499	1,304.5	33.09830378	-103.57556237	103.13	0.00	143.59	0.52
2500	1,305.0	33.09829732	-103.57556440	95.16	-0.09	126.68	0.43
2501	1,305.5	33.09829079	-103.57556627	84.81	0.00	121.02	0.50
2502	1,306.0	33.09828412	-103.57556817	85.55	-0.08	116.09	0.42
2503	1,306.6	33.09827739	-103.57557009	77.93	0.00	108.75	0.49
2504	1,307.1	33.09827087	-103.57557191	77.81	-0.04	106.91	0.45
2505	1,307.6	33.09826439	-103.57557371	71.41	0.00	101.06	0.48
2506	1,308.1	33.09825786	-103.57557546	84.81	-0.15	109.26	0.34
2507	1,308.7	33.09825133	-103.57557719	81.72	-0.02	114.61	0.45
2508	1,309.2	33.09824467	-103.57557888	105.47	-0.05	131.80	0.45
2509	1,309.7	33.09823801	-103.57558057	118.71	-0.01	120.43	0.52
2510	1,310.2	33.09823163	-103.57558216	137.58	-0.14	113.95	0.41
2511	1,310.7	33.09822526	-103.57558375	134.61	-0.10	125.74	0.32
2512	1,311.3	33.09821885	-103.57558537	129.84	-0.12	113.79	0.25
2513	1,311.8	33.09821256	-103.57558700	121.21	-0.04	114.34	0.38
2514	1,312.3	33.09820676	-103.57558865	102.97	-0.06	110.90	0.35
2515	1,312.8	33.09820105	-103.57559020	87.85	-0.01	101.37	0.34
2516	1,313.4	33.09819550	-103.57559153	84.14	-0.05	95.59	0.33
2517	1,313.9	33.09818979	-103.57559300	85.63	0.01	97.23	0.37
2518	1,314.4	33.09818387	-103.57559471	115.08	-0.06	118.67	0.31
2519	1,314.9	33.09817756	-103.57559655	53.98	0.10	-7.50	0.27
2520	1,315.4	33.09817079	-103.57559853	139.10	-0.02	-1.09	0.05
2521	1,316.0	33.09816418	-103.57560034	120.35	0.00	141.48	0.25
2522	1,316.5	33.09815772	-103.57560199	94.22	-0.11	129.92	0.19
2523	1,317.0	33.09815127	-103.57560357	67.70	-0.04	97.34	0.22
2524	1,317.5	33.09814480	-103.57560511	61.33	-0.09	75.04	0.20
2525	1,318.1	33.09813861	-103.57560677	45.86	-0.03	59.65	0.24
2526	1,318.6	33.09813254	-103.57560848	42.89	-0.10	48.98	0.20
2527	1,319.1	33.09812631	-103.57561083	34.69	-0.02	42.50	0.29
2528	1,319.6	33.09812008	-103.57561333	34.22	-0.03	38.09	0.29
2529	1,320.1	33.09811425	-103.57561570	27.34	-0.01	33.59	0.32
2530	1,320.7	33.09810848	-103.57561804	34.92	-0.12	32.62	0.18
2531	1,321.2	33.09810229	-103.57562046	27.50	-0.06	28.75	0.25
2532	1,321.7	33.09809609	-103.57562288	26.88	-0.09	26.41	0.24
2533	1,322.2	33.09808971	-103.57562526	23.67	-0.05	26.56	0.30
2534	1,322.8	33.09808337	-103.57562766	26.41	-0.10	26.41	0.30
2535	1,323.3	33.09807722	-103.57563021	25.74	-0.07	25.12	0.35
2536	1,323.8	33.09807110	-103.57563266	30.08	-0.12	27.58	0.31
2537	1,324.3	33.09806501	-103.57563478	27.31	-0.08	27.70	0.34
2538	1,324.8	33.09805893	-103.57563680	29.41	-0.10	28.28	0.35
2539	1,325.4	33.09805285	-103.57563859	31.56	-0.11	29.65	0.28
2540	1,325.9	33.09804669	-103.57564015	29.10	-0.12	27.38	0.29
2541	1,326.4	33.09804042	-103.57564134	28.71	-0.08	28.05	0.31
2542	1,326.9	33.09803399	-103.57564263	28.20	-0.12	28.28	0.29

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2543	1,327.5	33.09802736	-103.57564406	26.99	-0.08	28.79	0.30
2544	1,328.0	33.09802092	-103.57564553	26.21	-0.08	27.42	0.33
2545	1,328.5	33.09801464	-103.57564704	25.00	-0.05	23.63	0.36
2546	1,329.0	33.09800856	-103.57564869	24.81	-0.09	22.89	0.32
2547	1,329.5	33.09800257	-103.57565043	21.88	-0.07	21.37	0.39
2548	1,330.1	33.09799684	-103.57565216	21.17	-0.10	18.79	0.34
2549	1,330.6	33.09799119	-103.57565389	17.27	-0.02	18.13	0.34
2550	1,331.1	33.09798574	-103.57565568	19.02	-0.09	17.11	0.28
2551	1,331.6	33.09798033	-103.57565748	18.16	-0.04	16.80	0.30
2552	1,332.2	33.09797492	-103.57566007	15.31	-0.04	15.70	0.31
2553	1,332.7	33.09796949	-103.57566275	26.72	-0.17	17.85	0.15
2554	1,333.2	33.09796513	-103.57566775	16.17	-0.06	15.16	0.21
2555	1,333.7	33.09796103	-103.57567302	18.67	-0.07	15.86	0.20
2556	1,334.2	33.09796007	-103.57568088	14.06	-0.01	14.57	0.26
2557	1,334.8	33.09795972	-103.57568848	16.52	-0.06	14.96	0.20
2558	1,335.3	33.09796273	-103.57569459	14.06	-0.02	14.45	0.23
2559	1,335.8	33.09796638	-103.57569975	16.33	-0.06	14.88	0.23
2560	1,336.3	33.09797197	-103.57570188	15.20	-0.01	14.38	0.25
2561	1,336.9	33.09797795	-103.57570307	18.24	-0.08	14.96	0.26
2562	1,337.4	33.09798466	-103.57570233	18.05	-0.05	15.23	0.30
2563	1,337.9	33.09799127	-103.57570124	25.12	-0.14	16.60	0.26
2564	1,338.4	33.09799772	-103.57569965	19.81	-0.10	17.58	0.34
2565	1,338.9	33.09800424	-103.57569805	28.32	-0.19	19.61	0.25
2566	1,339.5	33.09801083	-103.57569645	22.11	-0.10	18.28	0.33
2567	1,340.0	33.09801744	-103.57569476	33.63	-0.23	21.95	0.19
2568	1,340.5	33.09802405	-103.57569301	25.00	-0.11	22.66	0.33
2569	1,341.0	33.09803067	-103.57569111	33.83	-0.21	25.66	0.21
2570	1,341.6	33.09803730	-103.57568914	25.31	-0.08	25.43	0.32
2571	1,342.1	33.09804384	-103.57568697	34.65	-0.17	28.20	0.29
2572	1,342.6	33.09805034	-103.57568474	29.41	-0.08	28.63	0.36
2573	1,343.1	33.09805703	-103.57568301	43.24	-0.25	32.77	0.17
2574	1,343.6	33.09806377	-103.57568136	33.20	-0.09	30.63	0.33
2575	1,344.2	33.09807065	-103.57568002	41.68	-0.17	33.71	0.26
2576	1,344.7	33.09807752	-103.57567870	31.09	-0.05	31.06	0.33
2577	1,345.2	33.09808428	-103.57567666	47.97	-0.30	35.16	0.10
2578	1,345.7	33.09809103	-103.57567462	30.35	-0.06	32.77	0.31
2579	1,346.3	33.09809759	-103.57567260	38.87	-0.18	36.95	0.22
2580	1,346.8	33.09810423	-103.57567067	33.16	-0.05	41.52	0.31
2581	1,347.3	33.09811081	-103.57566920	46.45	-0.11	56.45	0.23
2582	1,347.8	33.09811736	-103.57566773	67.54	-0.03	88.01	0.31
2583	1,348.3	33.09812355	-103.57566633	109.14	-0.03	114.53	0.27
2584	1,348.9	33.09812973	-103.57566485	43.01	0.07	-56.48	-0.08
2585	1,349.4	33.09813593	-103.57566323	116.17	0.15	-3.28	0.21
2586	1,349.9	33.09814221	-103.57566153	91.29	0.07	88.13	0.17
2587	1,350.4	33.09814862	-103.57565969	67.31	-0.05	92.23	0.17
2588	1,351.0	33.09815494	-103.57565772	50.47	-0.02	73.40	0.25
2589	1,351.5	33.09816119	-103.57565561	39.69	0.02	61.41	0.22
2590	1,352.0	33.09816767	-103.57565376	36.13	0.00	49.84	0.22
2591	1,352.5	33.09817429	-103.57565208	38.13	-0.05	42.62	0.22
2592	1,353.0	33.09818093	-103.57565051	30.66	0.00	40.70	0.27
2593	1,353.6	33.09818756	-103.57564902	28.67	-0.03	34.96	0.25
2594	1,354.1	33.09819400	-103.57564721	23.98	0.01	32.42	0.29
2595	1,354.6	33.09820036	-103.57564531	31.52	-0.11	33.83	0.18
2596	1,355.1	33.09820647	-103.57564386	23.79	-0.01	31.80	0.29
2597	1,355.7	33.09821253	-103.57564248	27.58	-0.06	33.59	0.26
2598	1,356.2	33.09821862	-103.57564160	25.08	0.01	34.61	0.29
2599	1,356.7	33.09822470	-103.57564075	33.28	-0.07	38.24	0.22
2600	1,357.2	33.09823065	-103.57564015	31.41	-0.01	41.76	0.31
2601	1,357.7	33.09823662	-103.57563950	43.56	-0.10	47.77	0.22
2602	1,358.3	33.09824296	-103.57563843	39.30	0.00	49.02	0.32
2603	1,358.8	33.09824929	-103.57563726	45.08	-0.01	61.48	0.29
2604	1,359.3	33.09825561	-103.57563562	56.99	0.02	69.65	0.35

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2605	1,359.8	33.09826193	-103.57563399	83.20	-0.09	77.31	0.29
2606	1,360.4	33.09826834	-103.57563237	100.47	-0.04	87.38	0.38
2607	1,360.9	33.09827485	-103.57563074	107.46	-0.07	110.00	0.35
2608	1,361.4	33.09828151	-103.57562912	115.90	-0.02	136.41	0.40
2609	1,361.9	33.09828789	-103.57562770	125.04	-0.07	135.00	0.39
2610	1,362.4	33.09829391	-103.57562654	123.16	-0.03	139.38	0.43
2611	1,363.0	33.09829976	-103.57562682	127.58	-0.08	143.24	0.43
2612	1,363.5	33.09830545	-103.57562834	118.67	0.05	117.62	0.59
2613	1,364.0	33.09831123	-103.57562876	99.26	-0.14	108.75	0.27
2614	1,364.5	33.09831705	-103.57562850	-9.26	4.36	84.81	2.52
2615	1,365.1	33.09832217	-103.57562644	46.02	0.98	83.36	2.12
2616	1,365.6	33.09832700	-103.57562363	58.16	0.21	88.75	0.62
2617	1,366.1	33.09833234	-103.57562016	70.63	0.00	92.23	0.36
2618	1,366.6	33.09833783	-103.57561652	77.50	-0.02	96.45	0.37
2619	1,367.1	33.09834368	-103.57561387	73.48	-0.04	93.48	0.35
2620	1,367.7	33.09834961	-103.57561135	64.57	-0.04	87.85	0.37
2621	1,368.2	33.09835602	-103.57560971	67.62	-0.15	83.87	0.23
2622	1,368.7	33.09836248	-103.57560812	57.46	-0.02	80.23	0.33
2623	1,369.2	33.09836876	-103.57560686	59.30	-0.06	79.84	0.31
2624	1,369.8	33.09837503	-103.57560552	65.78	-0.02	83.63	0.35
2625	1,370.3	33.09838126	-103.57560365	84.41	-0.14	92.15	0.24
2626	1,370.8	33.09838757	-103.57560186	94.92	-0.04	108.09	0.36
2627	1,371.3	33.09839404	-103.57560038	120.98	-0.10	119.96	0.32
2628	1,371.8	33.09840049	-103.57559899	142.89	-0.03	136.80	0.40
2629	1,372.4	33.09840674	-103.57559782	162.34	-0.08	168.52	0.40
2630	1,372.9	33.09841303	-103.57559663	174.84	-0.03	188.91	0.48
2631	1,373.4	33.09841928	-103.57559541	193.71	-0.08	200.86	0.48
2632	1,373.9	33.09842548	-103.57559429	209.06	-0.02	227.46	0.53
2633	1,374.5	33.09843157	-103.57559326	227.58	-0.07	242.89	0.52
2634	1,375.0	33.09843756	-103.57559210	247.42	-0.01	263.01	0.59
2635	1,375.5	33.09844347	-103.57559085	258.44	-0.03	272.73	0.62
2636	1,376.0	33.09844881	-103.57558988	272.15	0.00	288.91	0.66
2637	1,376.5	33.09845381	-103.57558907	274.88	-0.03	296.29	0.70
2638	1,377.1	33.09845814	-103.57558863	277.54	-0.03	295.86	0.70
2639	1,377.6	33.09846223	-103.57558833	261.06	0.01	284.18	0.72
2640	1,378.1	33.09846618	-103.57558783	249.81	-0.04	273.09	0.67
2641	1,378.6	33.09847010	-103.57558728	237.27	0.00	267.42	0.70
2642	1,379.2	33.09847435	-103.57558692	229.18	-0.02	268.59	0.69
2643	1,379.7	33.09847864	-103.57558658	228.28	-0.03	274.22	0.68
2644	1,380.2	33.09848327	-103.57558644	201.06	0.23	259.10	0.78
2645	1,380.7	33.09848793	-103.57558630	227.54	-0.04	249.45	0.68
2646	1,381.2	33.09849323	-103.57558621	228.44	0.02	245.63	0.66
2647	1,381.8	33.09849865	-103.57558607	222.73	-0.06	246.64	0.58
2648	1,382.3	33.09850472	-103.57558571	207.93	-0.02	231.80	0.63
2649	1,382.8	33.09851070	-103.57558535	191.72	-0.06	219.06	0.56
2650	1,383.3	33.09851641	-103.57558496	180.08	-0.02	211.95	0.57
2651	1,383.9	33.09852205	-103.57558423	170.90	-0.08	198.87	0.50
2652	1,384.4	33.09852761	-103.57558279	173.56	-0.02	201.37	0.56
2653	1,384.9	33.09853333	-103.57558138	175.23	-0.06	196.88	0.51
2654	1,385.4	33.09853935	-103.57558001	179.88	-0.03	190.51	0.52
2655	1,385.9	33.09854535	-103.57557861	179.92	-0.06	192.42	0.52
2656	1,386.5	33.09855130	-103.57557717	183.40	-0.04	203.36	0.54
2657	1,387.0	33.09855690	-103.57557586	182.03	-0.05	205.35	0.55
2658	1,387.5	33.09856225	-103.57557463	178.98	-0.04	198.48	0.55
2659	1,388.0	33.09856760	-103.57557375	175.47	-0.03	198.44	0.56
2660	1,388.6	33.09857298	-103.57557303	164.77	0.04	205.55	0.56
2661	1,389.1	33.09857699	-103.57557152	172.73	-0.02	205.20	0.55
2662	1,389.6	33.09858058	-103.57556974	186.95	-0.03	206.21	0.58
2663	1,390.1	33.09858168	-103.57556915	187.97	-0.03	210.94	0.61
2664	1,390.6	33.09858229	-103.57556881	187.27	-0.03	211.25	0.60
2665	1,391.2	33.09858473	-103.57556930	190.94	-0.03	211.48	0.61
2666	1,391.7	33.09858735	-103.57556987	189.96	-0.05	207.81	0.53

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2667	1,392.2	33.09859261	-103.57556885	193.87	-0.05	217.77	0.50
2668	1,392.7	33.09859796	-103.57556777	191.91	-0.05	218.95	0.53
2669	1,393.3	33.09860395	-103.57556605	195.23	-0.03	215.39	0.50
2670	1,393.8	33.09861004	-103.57556429	196.60	-0.03	224.18	0.50
2671	1,394.3	33.09861621	-103.57556250	207.11	-0.08	221.02	0.43
2672	1,394.8	33.09862249	-103.57556076	200.66	-0.03	204.57	0.45
2673	1,395.3	33.09862895	-103.57555918	196.64	-0.07	194.26	0.38
2674	1,395.9	33.09863540	-103.57555762	172.62	-0.05	173.98	0.39
2675	1,396.4	33.09864181	-103.57555608	153.13	-0.03	165.00	0.36
2676	1,396.9	33.09864802	-103.57555437	132.07	-0.04	134.65	0.34
2677	1,397.4	33.09865398	-103.57555243	111.41	-0.03	108.40	0.30
2678	1,398.0	33.09865997	-103.57555088	87.27	-0.07	89.92	0.31
2679	1,398.5	33.09866601	-103.57554969	68.20	-0.06	78.98	0.27
2680	1,399.0	33.09867213	-103.57554869	53.09	-0.05	67.89	0.27
2681	1,399.5	33.09867832	-103.57554781	40.39	-0.02	54.96	0.33
2682	1,400.0	33.09868454	-103.57554680	37.58	-0.06	48.95	0.33
2683	1,400.6	33.09869075	-103.57554573	36.68	-0.07	46.21	0.29
2684	1,401.1	33.09869683	-103.57554459	30.43	-0.03	40.35	0.32
2685	1,401.6	33.09870286	-103.57554344	29.02	-0.03	36.52	0.30
2686	1,402.1	33.09870875	-103.57554284	25.12	-0.04	32.34	0.33
2687	1,402.7	33.09871459	-103.57554235	24.96	-0.07	28.56	0.31
2688	1,403.2	33.09872052	-103.57554176	20.78	-0.03	26.29	0.32
2689	1,403.7	33.09872647	-103.57554116	17.93	0.01	25.23	0.28
2690	1,404.2	33.09873260	-103.57554085	19.41	-0.01	24.81	0.29
2691	1,404.7	33.09873876	-103.57554053	24.10	-0.10	24.65	0.26
2692	1,405.3	33.09874494	-103.57554021	21.37	-0.04	25.35	0.33
2693	1,405.8	33.09875110	-103.57553988	31.13	-0.15	29.18	0.23
2694	1,406.3	33.09875714	-103.57553954	28.71	-0.04	28.95	0.36
2695	1,406.8	33.09876316	-103.57553938	37.97	-0.11	34.30	0.30
2696	1,407.4	33.09876910	-103.57553970	39.45	-0.04	40.20	0.36
2697	1,407.9	33.09877464	-103.57554021	49.10	-0.13	46.33	0.32
2698	1,408.4	33.09877945	-103.57554103	45.90	-0.05	49.38	0.39
2699	1,408.9	33.09878338	-103.57554143	42.07	-0.07	48.75	0.38
2700	1,409.4	33.09878621	-103.57554134	45.31	-0.05	49.26	0.41
2701	1,410.0	33.09878832	-103.57554145	47.27	-0.06	50.16	0.39
2702	1,410.5	33.09878979	-103.57554175	42.66	-0.02	48.09	0.38
2703	1,411.0	33.09879005	-103.57554161	44.06	-0.04	48.79	0.40
2704	1,411.5	33.09878955	-103.57554119	44.96	-0.06	49.18	0.40
2705	1,412.1	33.09879148	-103.57554118	45.23	-0.04	48.98	0.40
2706	1,412.6	33.09879440	-103.57554135	45.35	-0.04	49.18	0.40
2707	1,413.1	33.09879792	-103.57554059	43.87	-0.08	48.44	0.34
2708	1,413.6	33.09880159	-103.57553956	40.59	-0.05	46.99	0.38
2709	1,414.1	33.09880556	-103.57553865	40.78	-0.11	45.12	0.33
2710	1,414.7	33.09880957	-103.57553776	38.79	-0.06	43.52	0.37
2711	1,415.2	33.09881418	-103.57553686	36.95	-0.05	42.31	0.37
2712	1,415.7	33.09881883	-103.57553596	40.31	-0.08	43.13	0.38
2713	1,416.2	33.09882371	-103.57553523	37.31	-0.04	42.03	0.41
2714	1,416.8	33.09882858	-103.57553451	43.48	-0.14	43.83	0.34
2715	1,417.3	33.09883349	-103.57553382	38.48	-0.06	43.09	0.42
2716	1,417.8	33.09883835	-103.57553320	40.39	-0.10	41.33	0.39
2717	1,418.3	33.09884307	-103.57553282	42.38	-0.06	44.57	0.40
2718	1,418.8	33.09884747	-103.57553229	40.94	-0.05	46.80	0.40
2719	1,419.4	33.09885108	-103.57553146	43.36	-0.10	45.35	0.33
2720	1,419.9	33.09885404	-103.57553106	42.70	-0.03	45.59	0.42
2721	1,420.4	33.09885599	-103.57553134	42.15	-0.03	46.25	0.44
2722	1,420.9	33.09885767	-103.57553160	40.31	-0.02	45.08	0.47
2723	1,421.5	33.09885908	-103.57553184	34.45	0.14	41.21	0.62
2724	1,422.0	33.09885870	-103.57553195	32.93	0.15	40.51	0.60
2725	1,422.5	33.09885687	-103.57553195	34.02	0.06	41.72	0.48
2726	1,423.0	33.09885604	-103.57553168	37.03	-0.04	43.20	0.40
2727	1,423.5	33.09885576	-103.57553125	38.71	-0.07	44.61	0.40
2728	1,424.1	33.09885773	-103.57553137	40.82	-0.07	45.27	0.42

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2729	1,424.6	33.09886055	-103.57553169	42.66	-0.08	44.69	0.37
2730	1,425.1	33.09886480	-103.57553111	43.56	-0.09	45.43	0.37
2731	1,425.6	33.09886941	-103.57553032	38.24	-0.04	42.15	0.40
2732	1,426.2	33.09887398	-103.57552889	35.12	-0.08	40.31	0.38
2733	1,426.7	33.09887856	-103.57552740	31.37	-0.05	37.07	0.41
2734	1,427.2	33.09888350	-103.57552585	30.86	-0.08	34.06	0.39
2735	1,427.7	33.09888845	-103.57552434	30.47	-0.04	32.46	0.40
2736	1,428.2	33.09889314	-103.57552344	28.59	-0.03	31.56	0.44
2737	1,428.8	33.09889789	-103.57552243	33.09	-0.12	31.21	0.36
2738	1,429.3	33.09890290	-103.57552080	28.52	-0.03	29.88	0.44
2739	1,429.8	33.09890787	-103.57551929	29.26	-0.07	29.18	0.44
2740	1,430.3	33.09891270	-103.57551808	30.27	-0.04	29.26	0.44
2741	1,430.9	33.09891752	-103.57551692	27.31	-0.02	29.30	0.46
2742	1,431.4	33.09892234	-103.57551584	31.41	-0.11	29.26	0.41
2743	1,431.9	33.09892707	-103.57551509	28.01	-0.03	28.52	0.47
2744	1,432.4	33.09893172	-103.57551484	28.56	-0.09	28.24	0.42
2745	1,432.9	33.09893641	-103.57551443	29.02	-0.07	27.46	0.41
2746	1,433.5	33.09894115	-103.57551387	25.70	-0.03	26.37	0.47
2747	1,434.0	33.09894509	-103.57551359	29.96	-0.11	26.60	0.39
2748	1,434.5	33.09894843	-103.57551350	25.82	-0.06	26.41	0.42
2749	1,435.0	33.09895089	-103.57551492	23.32	-0.08	25.70	0.39
2750	1,435.6	33.09895290	-103.57551710	25.43	-0.11	24.81	0.38
2751	1,436.1	33.09895174	-103.57552130	22.46	-0.06	23.32	0.41
2752	1,436.6	33.09894952	-103.57552614	26.76	-0.12	25.47	0.32
2753	1,437.1	33.09894583	-103.57553085	23.13	-0.04	25.55	0.43
2754	1,437.6	33.09894183	-103.57553554	23.28	-0.06	22.73	0.33
2755	1,438.2	33.09893692	-103.57553905	18.48	-0.01	22.54	0.34
2756	1,438.7	33.09893191	-103.57554244	22.15	-0.05	22.73	0.36
2757	1,439.2	33.09892655	-103.57554501	26.25	-0.09	25.23	0.31
2758	1,439.7	33.09892113	-103.57554756	22.31	-0.03	23.71	0.36
2759	1,440.3	33.09891526	-103.57554991	27.81	-0.09	25.00	0.31
2760	1,440.8	33.09890928	-103.57555221	23.09	-0.02	24.92	0.36
2761	1,441.3	33.09890355	-103.57555397	27.66	-0.09	26.60	0.31
2762	1,441.8	33.09889773	-103.57555591	24.14	-0.02	26.56	0.37
2763	1,442.3	33.09889200	-103.57555826	32.62	-0.12	29.88	0.28
2764	1,442.9	33.09888620	-103.57556049	28.01	-0.02	30.74	0.39
2765	1,443.4	33.09888035	-103.57556245	34.10	-0.11	32.38	0.30
2766	1,443.9	33.09887450	-103.57556436	31.99	-0.04	34.34	0.36
2767	1,444.4	33.09886866	-103.57556622	37.11	-0.09	37.03	0.34
2768	1,445.0	33.09886298	-103.57556796	37.77	-0.05	39.34	0.37
2769	1,445.5	33.09885747	-103.57556959	40.66	-0.08	41.64	0.37
2770	1,446.0	33.09885234	-103.57557116	42.97	-0.06	45.39	0.39
2771	1,446.5	33.09884747	-103.57557268	42.38	-0.05	45.20	0.40
2772	1,447.0	33.09884243	-103.57557412	50.12	-0.13	48.01	0.33
2773	1,447.6	33.09883732	-103.57557552	43.09	-0.03	46.99	0.40
2774	1,448.1	33.09883229	-103.57557706	46.68	-0.11	46.64	0.34
2775	1,448.6	33.09882730	-103.57557862	42.23	-0.04	46.29	0.38
2776	1,449.1	33.09882214	-103.57558022	44.02	-0.09	46.88	0.36
2777	1,449.7	33.09881697	-103.57558182	43.56	-0.05	48.75	0.38
2778	1,450.2	33.09881167	-103.57558312	45.35	-0.04	50.59	0.40
2779	1,450.7	33.09880637	-103.57558441	49.10	-0.08	54.26	0.36
2780	1,451.2	33.09880137	-103.57558590	48.67	-0.04	53.16	0.41
2781	1,451.7	33.09879628	-103.57558740	53.63	-0.11	54.69	0.34
2782	1,452.3	33.09879051	-103.57558893	53.20	-0.04	57.11	0.40
2783	1,452.8	33.09878475	-103.57559041	53.98	-0.07	58.52	0.38
2784	1,453.3	33.09877901	-103.57559173	50.00	-0.05	56.80	0.39
2785	1,453.8	33.09877329	-103.57559314	49.26	-0.10	53.44	0.38
2786	1,454.4	33.09876757	-103.57559478	47.58	-0.07	50.35	0.31
2787	1,454.9	33.09876188	-103.57559644	41.56	-0.06	43.67	0.31
2788	1,455.4	33.09875620	-103.57559815	36.25	-0.06	38.98	0.29
2789	1,455.9	33.09875051	-103.57559956	29.18	-0.03	35.90	0.32
2790	1,456.4	33.09874476	-103.57560061	31.88	-0.09	34.77	0.24

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2791	1,457.0	33.09873903	-103.57560148	27.15	-0.03	33.32	0.28
2792	1,457.5	33.09873324	-103.57560220	30.66	-0.10	33.52	0.21
2793	1,458.0	33.09872753	-103.57560291	27.07	-0.04	31.76	0.28
2794	1,458.5	33.09872184	-103.57560361	31.56	-0.11	33.56	0.23
2795	1,459.1	33.09871625	-103.57560443	30.35	-0.04	35.12	0.28
2796	1,459.6	33.09871068	-103.57560530	33.44	-0.08	36.13	0.27
2797	1,460.1	33.09870496	-103.57560666	37.03	-0.07	40.70	0.26
2798	1,460.6	33.09869915	-103.57560817	36.09	-0.04	44.18	0.27
2799	1,461.1	33.09869372	-103.57560961	42.81	-0.07	53.40	0.26
2800	1,461.7	33.09868833	-103.57561104	45.35	-0.04	56.17	0.30
2801	1,462.2	33.09868300	-103.57561243	60.59	-0.11	62.77	0.29
2802	1,462.7	33.09867765	-103.57561383	69.65	-0.04	67.85	0.36
2803	1,463.2	33.09867201	-103.57561531	85.66	-0.12	77.66	0.27
2804	1,463.8	33.09866640	-103.57561678	92.93	-0.04	85.86	0.33
2805	1,464.3	33.09866089	-103.57561818	100.47	-0.06	95.55	0.32
2806	1,464.8	33.09865533	-103.57561956	114.26	-0.04	112.38	0.34
2807	1,465.3	33.09864959	-103.57562089	128.95	-0.05	124.34	0.37
2808	1,465.8	33.09864372	-103.57562219	158.87	-0.10	145.00	0.34
2809	1,466.4	33.09863768	-103.57562338	179.14	-0.02	160.86	0.41
2810	1,466.9	33.09863171	-103.57562472	209.38	-0.07	188.71	0.39
2811	1,467.4	33.09862590	-103.57562629	230.86	-0.01	219.02	0.49
2812	1,467.9	33.09862006	-103.57562773	241.84	-0.06	239.92	0.46
2813	1,468.5	33.09861419	-103.57562900	242.15	0.00	252.62	0.55
2814	1,469.0	33.09860844	-103.57563067	245.66	-0.08	268.05	0.51
2815	1,469.5	33.09860277	-103.57563266	250.00	-0.01	262.54	0.62
2816	1,470.0	33.09859688	-103.57563431	243.59	-0.06	251.68	0.57
2817	1,470.5	33.09859086	-103.57563577	223.05	-0.02	236.80	0.58
2818	1,471.1	33.09858464	-103.57563754	200.90	-0.05	212.54	0.53
2819	1,471.6	33.09857833	-103.57563943	189.22	-0.02	199.02	0.55
2820	1,472.1	33.09857198	-103.57564151	176.72	-0.04	191.06	0.55
2821	1,472.6	33.09856566	-103.57564361	171.84	-0.04	181.60	0.53
2822	1,473.2	33.09855919	-103.57564565	163.87	-0.02	178.59	0.53
2823	1,473.7	33.09855270	-103.57564768	170.98	-0.04	187.07	0.52
2824	1,474.2	33.09854639	-103.57564977	169.61	-0.02	186.37	0.54
2825	1,474.7	33.09854012	-103.57565188	179.92	-0.03	199.57	0.56
2826	1,475.2	33.09853407	-103.57565431	185.63	-0.02	205.70	0.56
2827	1,475.8	33.09852795	-103.57565676	212.27	-0.03	226.06	0.57
2828	1,476.3	33.09852153	-103.57565923	226.21	0.00	234.10	0.62
2829	1,476.8	33.09851514	-103.57566165	245.31	0.00	253.36	0.65
2830	1,477.3	33.09850897	-103.57566387	253.59	0.01	270.43	0.69
2831	1,477.9	33.09850270	-103.57566623	265.35	-0.03	278.91	0.70
2832	1,478.4	33.09849628	-103.57566887	261.52	-0.01	282.62	0.73
2833	1,478.9	33.09848995	-103.57567131	272.34	-0.02	293.59	0.72
2834	1,479.4	33.09848376	-103.57567344	268.01	-0.01	287.58	0.76
2835	1,479.9	33.09847760	-103.57567535	271.17	-0.01	282.97	0.74
2836	1,480.5	33.09847152	-103.57567704	260.98	-0.01	275.08	0.75
2837	1,481.0	33.09846528	-103.57567873	252.46	-0.01	266.60	0.69
2838	1,481.5	33.09845896	-103.57568041	226.48	-0.01	255.98	0.67
2839	1,482.0	33.09845280	-103.57568223	221.13	-0.05	248.79	0.58
2840	1,482.6	33.09844673	-103.57568412	206.91	-0.01	231.45	0.59
2841	1,483.1	33.09844095	-103.57568612	199.45	-0.09	213.87	0.48
2842	1,483.6	33.09843527	-103.57568815	180.86	0.00	190.27	0.56
2843	1,484.1	33.09842967	-103.57568987	167.85	-0.10	170.82	0.43
2844	1,484.6	33.09842411	-103.57569153	122.50	-0.01	137.27	0.48
2845	1,485.2	33.09841793	-103.57569314	102.66	-0.04	123.91	0.40
2846	1,485.7	33.09841169	-103.57569475	75.66	0.29	108.79	0.73
2847	1,486.2	33.09840529	-103.57569596	76.80	0.22	102.42	0.80
2848	1,486.7	33.09839894	-103.57569720	68.48	0.18	96.95	0.78
2849	1,487.3	33.09839284	-103.57569864	73.44	-0.02	89.92	0.59
2850	1,487.8	33.09838656	-103.57570012	70.66	0.13	81.25	0.58
2851	1,488.3	33.09838019	-103.57570160	74.41	0.01	77.38	0.41
2852	1,488.8	33.09837371	-103.57570296	55.16	0.06	71.56	0.45

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2853	1,489.3	33.09836727	-103.57570393	49.81	-0.05	62.19	0.31
2854	1,489.9	33.09836084	-103.57570496	40.66	0.01	53.59	0.32
2855	1,490.4	33.09835443	-103.57570612	36.88	0.02	47.70	0.39
2856	1,490.9	33.09834787	-103.57570722	34.61	0.04	44.22	0.49
2857	1,491.4	33.09834110	-103.57570824	41.95	-0.07	46.84	0.27
2858	1,492.0	33.09833464	-103.57570883	38.20	-0.02	47.31	0.27
2859	1,492.5	33.09832841	-103.57570904	39.84	-0.05	46.06	0.25
2860	1,493.0	33.09832224	-103.57570939	38.95	0.01	45.08	0.26
2861	1,493.5	33.09831610	-103.57570986	44.81	-0.06	49.61	0.26
2862	1,494.0	33.09830914	-103.57571059	52.46	-0.02	61.33	0.33
2863	1,494.6	33.09830178	-103.57571146	65.31	-0.09	62.34	0.33
2864	1,495.1	33.09829486	-103.57571222	70.16	-0.05	57.31	0.36
2865	1,495.6	33.09828806	-103.57571294	65.66	-0.12	60.74	0.28
2866	1,496.1	33.09828144	-103.57571344	53.32	-0.08	60.00	0.36
2867	1,496.7	33.09827484	-103.57571391	48.59	-0.09	58.32	0.31
2868	1,497.2	33.09826803	-103.57571440	46.41	-0.06	50.63	0.33
2869	1,497.7	33.09826122	-103.57571490	48.95	-0.10	48.40	0.30
2870	1,498.2	33.09825501	-103.57571600	41.41	-0.05	45.74	0.34
2871	1,498.7	33.09824877	-103.57571708	40.16	-0.10	41.64	0.31
2872	1,499.3	33.09824222	-103.57571798	34.26	-0.05	37.31	0.34
2873	1,499.8	33.09823570	-103.57571893	32.23	-0.08	32.85	0.32
2874	1,500.3	33.09822939	-103.57572009	28.05	-0.01	32.19	0.29
2875	1,500.8	33.09822316	-103.57572114	27.38	-0.05	28.63	0.32
2876	1,501.3	33.09821717	-103.57572189	24.14	0.00	26.68	0.35
2877	1,501.9	33.09821144	-103.57572257	22.42	-0.03	25.27	0.31
2878	1,502.4	33.09820618	-103.57572311	19.57	0.00	23.59	0.32
2879	1,502.9	33.09820062	-103.57572354	20.86	-0.02	23.71	0.32
2880	1,503.4	33.09819465	-103.57572384	26.52	-0.08	25.08	0.28
2881	1,504.0	33.09818850	-103.57572405	21.91	-0.03	23.32	0.32
2882	1,504.5	33.09818218	-103.57572417	25.98	-0.07	24.30	0.30
2883	1,505.0	33.09817584	-103.57572487	23.79	-0.03	24.53	0.37
2884	1,505.5	33.09816950	-103.57572593	3.09	-0.01	18.63	0.40
2885	1,506.1	33.09816329	-103.57572724	11.56	0.00	17.85	0.40
2886	1,506.6	33.09815719	-103.57572864	24.84	-0.10	22.31	0.24
2887	1,507.1	33.09815089	-103.57573010	21.41	-0.03	22.15	0.31
2888	1,507.6	33.09814454	-103.57573158	24.65	-0.08	22.50	0.27
2889	1,508.1	33.09813816	-103.57573254	14.73	0.02	19.92	0.37
2890	1,508.7	33.09813181	-103.57573342	23.20	-0.09	21.48	0.35
2891	1,509.2	33.09812550	-103.57573488	22.97	-0.06	22.15	0.38
2892	1,509.7	33.09811919	-103.57573637	26.72	-0.10	22.15	0.29
2893	1,510.2	33.09811343	-103.57573752	27.93	-0.11	24.81	0.24
2894	1,510.8	33.09810769	-103.57573864	25.51	-0.11	26.02	0.24
2895	1,511.3	33.09810207	-103.57573958	34.45	-0.21	28.28	0.17
2896	1,511.8	33.09809626	-103.57574053	27.31	-0.10	27.85	0.22
2897	1,512.3	33.09808967	-103.57574156	32.34	-0.13	30.98	0.20
2898	1,512.8	33.09808306	-103.57574256	28.98	-0.05	34.84	0.29
2899	1,513.4	33.09807667	-103.57574344	44.18	-0.15	46.72	0.21
2900	1,513.9	33.09807010	-103.57574452	50.00	-0.04	61.84	0.34
2901	1,514.4	33.09806337	-103.57574590	57.77	0.01	25.43	0.06
2902	1,514.9	33.09805667	-103.57574706	57.27	0.06	-24.41	-0.09
2903	1,515.5	33.09805005	-103.57574796	48.95	-0.07	40.23	0.26
2904	1,516.0	33.09804352	-103.57574934	32.07	-0.08	44.53	0.30
2905	1,516.5	33.09803703	-103.57575111	22.07	-0.02	36.52	0.29
2906	1,517.0	33.09803057	-103.57575261	22.89	-0.08	30.51	0.25
2907	1,517.5	33.09802415	-103.57575397	25.63	-0.14	26.33	0.22
2908	1,518.1	33.09801765	-103.57575438	19.53	-0.09	22.85	0.27
2909	1,518.6	33.09801114	-103.57575441	20.82	-0.10	21.37	0.24
2910	1,519.1	33.09800447	-103.57575453	17.03	-0.04	18.13	0.33
2911	1,519.6	33.09799776	-103.57575467	21.64	-0.10	17.46	0.26
2912	1,520.1	33.09799114	-103.57575480	14.45	-0.03	15.39	0.30
2913	1,520.7	33.09798453	-103.57575493	15.51	-0.05	15.47	0.28
2914	1,521.2	33.09797803	-103.57575535	13.48	-0.04	14.57	0.28

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2915	1,521.7	33.09797153	-103.57575579	22.70	-0.14	17.15	0.15
2916	1,522.2	33.09796477	-103.57575651	15.39	-0.02	14.92	0.23
2917	1,522.8	33.09795803	-103.57575735	18.09	-0.07	15.63	0.19
2918	1,523.3	33.09795140	-103.57575897	15.55	-0.02	15.16	0.28
2919	1,523.8	33.09794478	-103.57576098	20.27	-0.09	16.02	0.21
2920	1,524.3	33.09793827	-103.57576433	14.49	-0.03	15.00	0.25
2921	1,524.8	33.09793269	-103.57576885	12.15	0.01	13.63	0.24
2922	1,525.4	33.09792913	-103.57577590	11.37	0.03	12.70	0.23
2923	1,525.9	33.09792742	-103.57578299	13.75	-0.02	13.59	0.19
2924	1,526.4	33.09792847	-103.57579008	10.78	0.03	12.46	0.22
2925	1,526.9	33.09793145	-103.57579562	13.75	-0.03	12.42	0.24
2926	1,527.5	33.09793643	-103.57579955	12.07	0.02	12.77	0.29
2927	1,528.0	33.09794233	-103.57580181	15.47	-0.03	13.32	0.23
2928	1,528.5	33.09794895	-103.57580285	14.02	-0.01	13.91	0.25
2929	1,529.0	33.09795580	-103.57580311	19.14	-0.07	15.08	0.19
2930	1,529.6	33.09796278	-103.57580296	15.16	-0.03	14.34	0.24
2931	1,530.1	33.09796974	-103.57580256	19.22	-0.07	14.61	0.21
2932	1,530.6	33.09797668	-103.57580206	14.38	0.00	13.75	0.25
2933	1,531.1	33.09798360	-103.57580115	15.43	-0.02	14.34	0.20
2934	1,531.6	33.09799054	-103.57580015	13.13	0.01	14.81	0.27
2935	1,532.2	33.09799746	-103.57579926	19.69	-0.08	17.62	0.18
2936	1,532.7	33.09800442	-103.57579839	16.37	-0.01	18.83	0.29
2937	1,533.2	33.09801132	-103.57579736	20.82	-0.02	25.16	0.26
2938	1,533.7	33.09801820	-103.57579630	32.38	-0.01	38.56	0.38
2939	1,534.2	33.09802495	-103.57579498	65.86	-0.05	53.36	0.32
2940	1,534.8	33.09803181	-103.57579372	49.26	0.11	-23.75	-0.22
2941	1,535.3	33.09803815	-103.57579290	53.40	-0.02	4.61	0.03
2942	1,535.8	33.09804467	-103.57579204	35.59	-0.04	39.61	0.33
2943	1,536.3	33.09805132	-103.57579113	30.94	-0.12	37.23	0.24
2944	1,536.9	33.09805793	-103.57579031	22.31	-0.03	29.06	0.33
2945	1,537.4	33.09806447	-103.57578966	23.16	-0.09	25.90	0.28
2946	1,537.9	33.09807093	-103.57578900	18.71	-0.04	21.95	0.32
2947	1,538.4	33.09807729	-103.57578832	22.58	-0.10	21.60	0.22
2948	1,538.9	33.09808363	-103.57578760	19.41	-0.04	20.39	0.30
2949	1,539.5	33.09808997	-103.57578684	30.90	-0.17	21.80	0.18
2950	1,540.0	33.09809629	-103.57578624	21.09	-0.05	18.20	0.28
2951	1,540.5	33.09810257	-103.57578576	24.45	-0.13	19.53	0.21
2952	1,541.0	33.09810895	-103.57578519	17.19	-0.04	18.05	0.28
2953	1,541.6	33.09811538	-103.57578458	24.88	-0.14	19.22	0.20
2954	1,542.1	33.09812213	-103.57578411	16.56	-0.02	16.13	0.21
2955	1,542.6	33.09812899	-103.57578368	21.41	-0.12	16.17	0.14
2956	1,543.1	33.09813561	-103.57578314	15.59	-0.03	15.74	0.30
2957	1,543.6	33.09814220	-103.57578257	20.98	-0.11	17.07	0.23
2958	1,544.2	33.09814888	-103.57578220	15.51	-0.02	16.52	0.35
2959	1,544.7	33.09815552	-103.57578185	19.77	-0.07	17.42	0.30
2960	1,545.2	33.09816208	-103.57578161	15.94	-0.02	16.13	0.33
2961	1,545.7	33.09816862	-103.57578134	22.07	-0.09	17.11	0.21
2962	1,546.3	33.09817502	-103.57578069	16.80	0.00	17.23	0.28
2963	1,546.8	33.09818137	-103.57577995	18.71	-0.03	18.79	0.26
2964	1,547.3	33.09818759	-103.57577887	16.95	0.01	18.13	0.32
2965	1,547.8	33.09819384	-103.57577772	23.83	-0.09	20.12	0.23
2966	1,548.3	33.09820025	-103.57577638	18.48	-0.03	19.53	0.26
2967	1,548.9	33.09820644	-103.57577523	22.34	-0.08	20.08	0.26
2968	1,549.4	33.09821224	-103.57577443	18.48	-0.04	19.69	0.26
2969	1,549.9	33.09821811	-103.57577364	17.85	-0.03	20.04	0.23
2970	1,550.4	33.09822407	-103.57577286	18.87	-0.02	20.20	0.25
2971	1,551.0	33.09822994	-103.57577192	17.93	-0.02	20.63	0.25
2972	1,551.5	33.09823573	-103.57577083	25.08	-0.10	22.85	0.16
2973	1,552.0	33.09824132	-103.57576980	21.37	-0.01	23.67	0.27
2974	1,552.5	33.09824681	-103.57576880	25.27	-0.05	22.97	0.23
2975	1,553.0	33.09825234	-103.57576809	28.36	-0.01	24.69	0.28
2976	1,553.6	33.09825788	-103.57576751	41.45	-0.14	31.48	0.12

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
2977	1,554.1	33.09826365	-103.57576704	37.11	-0.06	33.87	0.20
2978	1,554.6	33.09826948	-103.57576660	37.19	-0.08	35.70	0.25
2979	1,555.1	33.09827584	-103.57576568	37.97	-0.03	33.48	0.30
2980	1,555.7	33.09828225	-103.57576470	35.98	-0.03	35.43	0.27
2981	1,556.2	33.09828808	-103.57576353	38.87	-0.02	42.07	0.27
2982	1,556.7	33.09829389	-103.57576236	38.71	-0.01	42.58	0.28
2983	1,557.2	33.09829968	-103.57576151	48.91	-0.08	43.87	0.22
2984	1,557.7	33.09830553	-103.57576071	46.25	0.01	47.31	0.30
2985	1,558.3	33.09831158	-103.57576032	54.57	-0.07	54.41	0.21
2986	1,558.8	33.09831735	-103.57575983	50.94	0.05	48.63	0.32
2987	1,559.3	33.09832205	-103.57575901	52.54	0.05	45.55	0.27
2988	1,559.8	33.09832701	-103.57575828	36.56	0.05	35.16	-0.07
2989	1,560.4	33.09833226	-103.57575781	36.17	-0.03	34.57	0.01
2990	1,560.9	33.09833796	-103.57575751	29.34	0.01	38.79	0.25
2991	1,561.4	33.09834432	-103.57575751	32.46	-0.05	41.56	0.24
2992	1,561.9	33.09835056	-103.57575742	33.05	0.00	41.21	0.28
2993	1,562.4	33.09835666	-103.57575724	38.83	-0.04	41.99	0.26
2994	1,563.0	33.09836265	-103.57575716	40.00	-0.02	46.76	0.30
2995	1,563.5	33.09836854	-103.57575717	44.65	-0.03	54.34	0.30
2996	1,564.0	33.09837454	-103.57575734	54.96	-0.01	62.34	0.30
2997	1,564.5	33.09838063	-103.57575759	69.18	-0.04	70.16	0.30
2998	1,565.1	33.09838653	-103.57575714	86.56	-0.04	75.08	0.28
2999	1,565.6	33.09839235	-103.57575640	95.70	-0.01	89.41	0.35
3000	1,566.1	33.09839823	-103.57575566	104.92	-0.11	108.52	0.28
3001	1,566.6	33.09840415	-103.57575492	86.33	-0.03	93.32	0.36
3002	1,567.1	33.09841006	-103.57575455	81.95	-0.12	90.16	0.29
3003	1,567.7	33.09841598	-103.57575422	63.83	-0.01	89.77	0.38
3004	1,568.2	33.09842177	-103.57575338	67.07	-0.11	87.15	0.27
3005	1,568.7	33.09842758	-103.57575250	62.85	0.01	86.25	0.39
3006	1,569.2	33.09843341	-103.57575130	73.95	-0.09	90.12	0.33
3007	1,569.8	33.09843927	-103.57575014	75.27	-0.02	89.45	0.39
3008	1,570.3	33.09844533	-103.57574923	88.16	-0.06	97.66	0.36
3009	1,570.8	33.09845136	-103.57574838	102.15	-0.04	111.09	0.39
3010	1,571.3	33.09845731	-103.57574774	108.59	-0.04	116.76	0.43
3011	1,571.8	33.09846322	-103.57574716	116.06	-0.03	128.44	0.44
3012	1,572.4	33.09846897	-103.57574671	119.30	-0.04	137.03	0.45
3013	1,572.9	33.09847496	-103.57574612	125.04	-0.03	148.36	0.43
3014	1,573.4	33.09848126	-103.57574531	123.32	0.00	152.23	0.46
3015	1,573.9	33.09848750	-103.57574429	111.41	-0.16	148.91	0.05
3016	1,574.5	33.09849368	-103.57574306	119.41	-0.12	158.44	-0.11
3017	1,575.0	33.09849979	-103.57574191	133.63	-0.09	152.77	0.29
3018	1,575.5	33.09850585	-103.57574084	144.14	-0.01	145.78	0.45
3019	1,576.0	33.09851173	-103.57573978	153.71	-0.08	150.08	0.43
3020	1,576.5	33.09851752	-103.57573872	154.77	-0.01	144.65	0.49
3021	1,577.1	33.09852321	-103.57573818	147.38	-0.14	135.47	0.36
3022	1,577.6	33.09852887	-103.57573783	108.05	-0.02	116.45	0.46
3023	1,578.1	33.09853447	-103.57573759	91.17	-0.08	115.98	0.37
3024	1,578.6	33.09854002	-103.57573737	83.32	-0.01	116.56	0.42
3025	1,579.1	33.09854580	-103.57573721	90.04	-0.07	102.85	0.38
3026	1,579.7	33.09855159	-103.57573705	93.24	-0.01	103.79	0.43
3027	1,580.2	33.09855695	-103.57573621	93.48	-0.04	108.13	0.43
3028	1,580.7	33.09856222	-103.57573543	101.95	-0.05	107.85	0.40
3029	1,581.2	33.09856698	-103.57573565	104.41	-0.02	115.82	0.43
3030	1,581.8	33.09857177	-103.57573586	105.35	-0.09	111.72	0.37
3031	1,582.3	33.09857679	-103.57573602	100.20	-0.02	105.12	0.44
3032	1,582.8	33.09858195	-103.57573606	96.29	-0.06	109.49	0.38
3033	1,583.3	33.09858753	-103.57573568	94.61	-0.02	118.48	0.44
3034	1,583.9	33.09859305	-103.57573524	103.36	-0.06	121.72	0.40
3035	1,584.4	33.09859853	-103.57573467	117.77	-0.04	118.83	0.40
3036	1,584.9	33.09860411	-103.57573421	129.22	-0.05	123.48	0.39
3037	1,585.4	33.09860982	-103.57573392	141.09	-0.06	134.30	0.40
3038	1,585.9	33.09861554	-103.57573360	133.79	-0.03	132.66	0.41

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3039	1,586.5	33.09862129	-103.57573325	118.20	-0.07	122.34	0.39
3040	1,587.0	33.09862677	-103.57573291	105.47	-0.01	126.95	0.43
3041	1,587.5	33.09863203	-103.57573257	102.07	-0.08	136.25	0.41
3042	1,588.0	33.09863736	-103.57573210	100.51	-0.02	132.97	0.43
3043	1,588.6	33.09864272	-103.57573157	119.10	-0.14	132.42	0.32
3044	1,589.1	33.09864848	-103.57573089	122.93	-0.05	129.49	0.38
3045	1,589.6	33.09865436	-103.57573015	129.77	-0.05	139.65	0.42
3046	1,590.1	33.09866009	-103.57572928	131.72	-0.03	148.91	0.42
3047	1,590.6	33.09866579	-103.57572839	126.41	-0.05	144.34	0.41
3048	1,591.2	33.09867115	-103.57572735	119.77	-0.08	137.23	0.36
3049	1,591.7	33.09867649	-103.57572630	108.24	-0.04	127.38	0.38
3050	1,592.2	33.09868208	-103.57572556	103.79	-0.12	119.57	0.34
3051	1,592.7	33.09868769	-103.57572476	89.06	-0.05	112.70	0.40
3052	1,593.3	33.09869334	-103.57572330	91.84	-0.18	111.91	0.30
3053	1,593.8	33.09869896	-103.57572179	77.46	-0.06	100.74	0.40
3054	1,594.3	33.09870429	-103.57572014	81.45	-0.21	94.10	0.18
3055	1,594.8	33.09870978	-103.57571862	64.92	-0.07	85.04	0.32
3056	1,595.3	33.09871566	-103.57571749	59.14	-0.11	81.52	0.33
3057	1,595.9	33.09872150	-103.57571647	54.96	-0.06	78.36	0.36
3058	1,596.4	33.09872725	-103.57571568	52.46	-0.09	72.46	0.35
3059	1,596.9	33.09873307	-103.57571506	51.64	-0.06	70.31	0.31
3060	1,597.4	33.09873896	-103.57571466	48.16	-0.07	65.70	0.32
3061	1,598.0	33.09874498	-103.57571400	43.52	-0.04	61.80	0.32
3062	1,598.5	33.09875107	-103.57571310	39.57	-0.03	59.06	0.33
3063	1,599.0	33.09875699	-103.57571154	40.82	-0.05	56.48	0.28
3064	1,599.5	33.09876281	-103.57570956	41.25	-0.03	58.52	0.34
3065	1,600.0	33.09876843	-103.57570790	52.46	-0.12	63.48	0.28
3066	1,600.6	33.09877398	-103.57570637	50.82	-0.05	64.92	0.33
3067	1,601.1	33.09877962	-103.57570501	60.35	-0.14	65.74	0.29
3068	1,601.6	33.09878529	-103.57570369	62.03	-0.04	69.84	0.42
3069	1,602.1	33.09879107	-103.57570262	72.23	-0.13	74.38	0.34
3070	1,602.7	33.09879688	-103.57570159	69.69	-0.05	75.12	0.43
3071	1,603.2	33.09880196	-103.57570096	70.98	-0.10	76.21	0.40
3072	1,603.7	33.09880698	-103.57570036	72.54	-0.05	80.59	0.44
3073	1,604.2	33.09881121	-103.57569998	71.29	-0.03	81.02	0.45
3074	1,604.7	33.09881553	-103.57569960	74.45	-0.11	78.13	0.35
3075	1,605.3	33.09882037	-103.57569915	68.13	-0.05	77.81	0.39
3076	1,605.8	33.09882515	-103.57569866	61.17	-0.07	71.60	0.32
3077	1,606.3	33.09882967	-103.57569801	60.43	-0.04	70.82	0.41
3078	1,606.8	33.09883437	-103.57569753	60.98	-0.05	70.39	0.39
3079	1,607.4	33.09883944	-103.57569747	63.95	-0.13	70.20	0.33
3080	1,607.9	33.09884448	-103.57569733	57.81	-0.07	68.40	0.39
3081	1,608.4	33.09884945	-103.57569709	54.06	-0.07	66.17	0.36
3082	1,608.9	33.09885451	-103.57569676	51.48	-0.02	63.24	0.38
3083	1,609.4	33.09885970	-103.57569632	50.82	-0.05	61.37	0.39
3084	1,610.0	33.09886509	-103.57569597	51.84	-0.11	56.88	0.35
3085	1,610.5	33.09887062	-103.57569569	42.58	-0.02	49.65	0.40
3086	1,611.0	33.09887586	-103.57569513	40.66	-0.12	44.77	0.30
3087	1,611.5	33.09888092	-103.57569441	30.31	-0.02	37.70	0.36
3088	1,612.1	33.09888635	-103.57569392	28.44	-0.08	32.62	0.33
3089	1,612.6	33.09889190	-103.57569352	27.03	-0.07	30.63	0.35
3090	1,613.1	33.09889748	-103.57569305	22.73	-0.05	27.38	0.38
3091	1,613.6	33.09890306	-103.57569257	24.92	-0.09	25.98	0.34
3092	1,614.1	33.09890835	-103.57569249	21.02	-0.04	23.24	0.37
3093	1,614.7	33.09891361	-103.57569246	26.48	-0.14	23.20	0.28
3094	1,615.2	33.09891886	-103.57569232	18.32	0.00	21.80	0.37
3095	1,615.7	33.09892408	-103.57569220	22.77	-0.08	20.94	0.31
3096	1,616.2	33.09892938	-103.57569230	20.31	-0.05	21.64	0.34
3097	1,616.8	33.09893463	-103.57569246	19.45	-0.05	21.48	0.34
3098	1,617.3	33.09893981	-103.57569302	22.34	-0.10	21.45	0.31
3099	1,617.8	33.09894483	-103.57569377	19.73	-0.05	20.59	0.36
3100	1,618.3	33.09894932	-103.57569515	21.60	-0.11	20.74	0.31

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3101	1,618.8	33.09895280	-103.57569746	18.75	-0.07	20.23	0.33
3102	1,619.4	33.09895410	-103.57570183	20.20	-0.11	20.59	0.26
3103	1,619.9	33.09895392	-103.57570638	19.77	-0.05	21.91	0.31
3104	1,620.4	33.09895148	-103.57571125	21.17	-0.08	22.85	0.28
3105	1,620.9	33.09894828	-103.57571578	21.64	-0.04	24.53	0.32
3106	1,621.5	33.09894427	-103.57571993	23.09	-0.05	25.12	0.30
3107	1,622.0	33.09893994	-103.57572385	27.85	-0.09	26.80	0.26
3108	1,622.5	33.09893538	-103.57572761	25.82	-0.04	29.77	0.35
3109	1,623.0	33.09893079	-103.57573128	31.13	-0.10	31.41	0.28
3110	1,623.5	33.09892618	-103.57573492	28.48	-0.03	31.41	0.32
3111	1,624.1	33.09892131	-103.57573799	31.52	-0.09	32.03	0.26
3112	1,624.6	33.09891632	-103.57574086	30.20	-0.05	34.38	0.31
3113	1,625.1	33.09891093	-103.57574309	29.45	-0.05	35.20	0.34
3114	1,625.6	33.09890547	-103.57574517	30.66	-0.05	36.60	0.30
3115	1,626.1	33.09890050	-103.57574564	29.34	-0.05	35.23	0.29
3116	1,626.7	33.09889558	-103.57574595	28.05	-0.07	35.08	0.23
3117	1,627.2	33.09888992	-103.57574725	31.68	-0.07	39.69	0.27
3118	1,627.7	33.09888424	-103.57574861	35.70	-0.08	42.97	0.29
3119	1,628.2	33.09887883	-103.57575005	41.48	-0.08	46.84	0.30
3120	1,628.8	33.09887338	-103.57575150	42.93	-0.05	48.16	0.33
3121	1,629.3	33.09886786	-103.57575291	42.11	-0.08	47.97	0.24
3122	1,629.8	33.09886225	-103.57575414	40.98	-0.02	48.36	0.31
3123	1,630.3	33.09885650	-103.57575484	43.71	-0.07	47.19	0.25
3124	1,630.9	33.09885098	-103.57575562	38.36	0.00	47.11	0.29
3125	1,631.4	33.09884592	-103.57575656	40.16	-0.06	46.72	0.29
3126	1,631.9	33.09884063	-103.57575764	41.17	-0.06	47.50	0.30
3127	1,632.4	33.09883506	-103.57575889	40.31	-0.04	46.60	0.35
3128	1,632.9	33.09882950	-103.57576025	43.20	-0.09	48.01	0.28
3129	1,633.5	33.09882393	-103.57576170	42.73	-0.03	49.14	0.36
3130	1,634.0	33.09881859	-103.57576319	48.56	-0.12	49.02	0.28
3131	1,634.5	33.09881339	-103.57576471	41.06	-0.01	45.00	0.34
3132	1,635.0	33.09880784	-103.57576622	43.44	-0.07	42.85	0.33
3133	1,635.6	33.09880209	-103.57576771	40.39	-0.05	45.55	0.32
3134	1,636.1	33.09879630	-103.57576889	40.43	-0.06	45.90	0.33
3135	1,636.6	33.09879047	-103.57576997	43.40	-0.08	47.54	0.33
3136	1,637.1	33.09878466	-103.57577102	41.13	-0.06	45.70	0.33
3137	1,637.6	33.09877884	-103.57577206	44.26	-0.07	47.27	0.29
3138	1,638.2	33.09877330	-103.57577346	41.52	-0.04	48.09	0.28
3139	1,638.7	33.09876776	-103.57577489	47.89	-0.11	50.86	0.22
3140	1,639.2	33.09876291	-103.57577551	47.27	-0.04	56.64	0.32
3141	1,639.7	33.09875798	-103.57577619	55.55	-0.11	57.07	0.21
3142	1,640.3	33.09875229	-103.57577739	65.35	-0.03	58.52	0.28
3143	1,640.8	33.09874657	-103.57577857	78.28	-0.09	64.22	0.22
3144	1,641.3	33.09874103	-103.57577961	73.44	-0.04	65.31	0.25
3145	1,641.8	33.09873536	-103.57578050	55.78	0.01	59.38	0.21
3146	1,642.3	33.09872948	-103.57578093	46.95	0.05	58.32	0.27
3147	1,642.9	33.09872359	-103.57578160	45.66	-0.02	56.64	0.26
3148	1,643.4	33.09871770	-103.57578271	42.97	-0.02	51.80	0.22
3149	1,643.9	33.09871173	-103.57578372	36.52	-0.01	45.51	0.28
3150	1,644.4	33.09870567	-103.57578460	38.79	-0.05	46.13	0.26
3151	1,645.0	33.09869952	-103.57578537	37.34	-0.02	46.33	0.29
3152	1,645.5	33.09869330	-103.57578604	43.67	-0.08	47.62	0.27
3153	1,646.0	33.09868712	-103.57578673	42.85	-0.02	48.56	0.31
3154	1,646.5	33.09868096	-103.57578745	46.64	-0.10	49.88	0.23
3155	1,647.0	33.09867514	-103.57578808	42.19	-0.02	47.93	0.30
3156	1,647.6	33.09866947	-103.57578868	45.70	-0.09	48.13	0.22
3157	1,648.1	33.09866371	-103.57578931	38.79	-0.03	43.67	0.28
3158	1,648.6	33.09865790	-103.57578996	36.45	-0.08	40.00	0.27
3159	1,649.1	33.09865205	-103.57579102	35.35	-0.06	39.92	0.23
3160	1,649.7	33.09864620	-103.57579215	31.76	-0.05	37.31	0.28
3161	1,650.2	33.09864030	-103.57579294	33.13	-0.07	36.41	0.29
3162	1,650.7	33.09863441	-103.57579374	29.14	-0.01	34.65	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3163	1,651.2	33.09862841	-103.57579532	35.16	-0.09	36.25	0.24
3164	1,651.7	33.09862246	-103.57579684	31.17	0.00	36.21	0.34
3165	1,652.3	33.09861678	-103.57579799	40.55	-0.13	38.05	0.21
3166	1,652.8	33.09861114	-103.57579907	34.45	-0.02	39.10	0.29
3167	1,653.3	33.09860559	-103.57579992	40.20	-0.07	44.26	0.26
3168	1,653.8	33.09859996	-103.57580073	47.23	-0.01	47.27	0.29
3169	1,654.4	33.09859410	-103.57580147	63.16	-0.04	51.41	0.29
3170	1,654.9	33.09858826	-103.57580220	77.42	-0.06	59.26	0.27
3171	1,655.4	33.09858242	-103.57580289	76.25	-0.01	62.46	0.32
3172	1,655.9	33.09857645	-103.57580378	73.05	-0.07	62.23	0.28
3173	1,656.4	33.09857028	-103.57580491	54.34	-0.01	56.68	0.33
3174	1,657.0	33.09856414	-103.57580621	51.09	-0.11	54.88	0.21
3175	1,657.5	33.09855803	-103.57580765	38.13	0.00	49.06	0.31
3176	1,658.0	33.09855199	-103.57580919	36.06	-0.04	44.96	0.27
3177	1,658.5	33.09854598	-103.57581078	33.44	0.00	43.32	0.31
3178	1,659.1	33.09854012	-103.57581226	35.86	-0.05	43.44	0.28
3179	1,659.6	33.09853434	-103.57581369	36.84	0.00	46.60	0.33
3180	1,660.1	33.09852854	-103.57581481	41.68	-0.05	50.94	0.33
3181	1,660.6	33.09852272	-103.57581586	44.41	-0.02	55.27	0.29
3182	1,661.1	33.09851682	-103.57581657	48.16	-0.03	59.96	0.31
3183	1,661.7	33.09851091	-103.57581723	50.39	0.00	65.63	0.33
3184	1,662.2	33.09850500	-103.57581860	52.97	0.01	67.85	0.35
3185	1,662.7	33.09849910	-103.57581996	61.84	-0.08	72.89	0.26
3186	1,663.2	33.09849331	-103.57582103	59.41	-0.01	76.72	0.33
3187	1,663.8	33.09848746	-103.57582209	65.47	-0.07	77.66	0.29
3188	1,664.3	33.09848135	-103.57582305	60.59	0.00	74.49	0.33
3189	1,664.8	33.09847522	-103.57582406	60.82	-0.09	71.72	0.24
3190	1,665.3	33.09846908	-103.57582520	46.48	0.01	62.34	0.32
3191	1,665.8	33.09846312	-103.57582641	44.69	-0.05	58.75	0.25
3192	1,666.4	33.09845756	-103.57582777	39.45	-0.01	56.64	0.30
3193	1,666.9	33.09845173	-103.57582899	43.98	-0.08	56.99	0.27
3194	1,667.4	33.09844549	-103.57583000	43.87	-0.01	58.71	0.30
3195	1,667.9	33.09843929	-103.57583107	51.60	-0.07	60.31	0.27
3196	1,668.5	33.09843319	-103.57583222	55.70	-0.02	64.34	0.26
3197	1,669.0	33.09842707	-103.57583359	54.26	-0.04	60.04	0.27
3198	1,669.5	33.09842096	-103.57583514	53.36	-0.02	59.57	0.22
3199	1,670.0	33.09841483	-103.57583654	45.59	-0.04	51.02	0.29
3200	1,670.5	33.09840868	-103.57583786	40.35	-0.06	45.55	0.23
3201	1,671.1	33.09840266	-103.57583900	31.76	-0.03	38.71	0.27
3202	1,671.6	33.09839669	-103.57584008	30.59	-0.05	35.63	0.26
3203	1,672.1	33.09839058	-103.57584108	23.98	0.01	31.56	0.29
3204	1,672.6	33.09838442	-103.57584207	31.02	-0.10	31.29	0.16
3205	1,673.1	33.09837879	-103.57584317	21.88	0.02	27.58	0.22
3206	1,673.7	33.09837320	-103.57584429	31.17	-0.12	28.20	0.13
3207	1,674.2	33.09836728	-103.57584525	21.80	-0.01	24.96	0.27
3208	1,674.7	33.09836136	-103.57584625	28.13	-0.10	26.41	0.20
3209	1,675.2	33.09835551	-103.57584787	22.70	0.00	26.09	0.26
3210	1,675.8	33.09834960	-103.57584952	27.15	-0.07	26.56	0.24
3211	1,676.3	33.09834332	-103.57585139	25.98	-0.03	27.27	0.29
3212	1,676.8	33.09833719	-103.57585332	34.26	-0.09	27.42	0.24
3213	1,677.3	33.09833159	-103.57585543	30.59	-0.01	28.20	0.25
3214	1,677.9	33.09832583	-103.57585754	28.44	-0.06	26.29	0.22
3215	1,678.4	33.09831975	-103.57585966	28.28	-0.02	27.81	0.23
3216	1,678.9	33.09831358	-103.57586150	27.23	-0.04	26.17	0.29
3217	1,679.4	33.09830727	-103.57586292	26.48	0.07	25.39	0.31
3218	1,679.9	33.09830096	-103.57586442	23.52	0.02	24.30	0.33
3219	1,680.5	33.09829459	-103.57586603	26.21	-0.03	23.91	0.21
3220	1,681.0	33.09828835	-103.57586765	23.24	-0.01	22.70	0.28
3221	1,681.5	33.09828218	-103.57586929	25.20	-0.03	22.03	0.22
3222	1,682.0	33.09827601	-103.57587053	19.14	0.01	19.30	0.28
3223	1,682.6	33.09826983	-103.57587156	21.99	-0.04	19.49	0.23
3224	1,683.1	33.09826423	-103.57587220	15.51	0.04	17.19	0.28

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3225	1,683.6	33.09825880	-103.57587271	13.48	0.03	15.20	0.24
3226	1,684.1	33.09825314	-103.57587344	11.68	0.03	13.52	0.18
3227	1,684.6	33.09824741	-103.57587421	10.31	0.05	13.63	0.22
3228	1,685.2	33.09824176	-103.57587559	12.03	0.04	14.49	0.22
3229	1,685.7	33.09823613	-103.57587702	18.56	-0.07	16.37	0.16
3230	1,686.2	33.09823048	-103.57587837	15.39	-0.01	15.74	0.21
3231	1,686.7	33.09822488	-103.57587977	16.56	-0.04	15.98	0.19
3232	1,687.3	33.09821967	-103.57588167	15.82	0.04	16.80	0.22
3233	1,687.8	33.09821434	-103.57588352	19.18	-0.03	17.85	0.23
3234	1,688.3	33.09820870	-103.57588509	20.90	-0.03	18.95	0.23
3235	1,688.8	33.09820299	-103.57588684	21.29	-0.03	19.45	0.24
3236	1,689.3	33.09819718	-103.57588907	28.56	-0.11	22.85	0.16
3237	1,689.9	33.09819140	-103.57589111	20.94	0.00	20.51	0.24
3238	1,690.4	33.09818565	-103.57589278	21.09	-0.03	18.67	0.24
3239	1,690.9	33.09817990	-103.57589445	15.94	0.01	17.23	0.28
3240	1,691.4	33.09817412	-103.57589613	19.73	-0.05	16.95	0.20
3241	1,692.0	33.09816821	-103.57589791	15.59	0.03	15.74	0.27
3242	1,692.5	33.09816217	-103.57589978	23.71	-0.10	16.60	0.15
3243	1,693.0	33.09815607	-103.57590173	15.43	0.02	13.98	0.29
3244	1,693.5	33.09814995	-103.57590371	18.13	-0.03	14.18	0.23
3245	1,694.0	33.09814393	-103.57590587	13.67	0.02	13.63	0.28
3246	1,694.6	33.09813797	-103.57590811	19.88	-0.07	14.38	0.19
3247	1,695.1	33.09813241	-103.57591045	13.67	0.01	12.58	0.26
3248	1,695.6	33.09812697	-103.57591283	16.17	-0.05	12.77	0.22
3249	1,696.1	33.09812127	-103.57591503	13.13	-0.01	12.15	0.26
3250	1,696.7	33.09811551	-103.57591721	13.20	-0.03	12.15	0.25
3251	1,697.2	33.09810961	-103.57591931	14.92	-0.02	12.62	0.26
3252	1,697.7	33.09810371	-103.57592139	12.89	0.01	11.99	0.29
3253	1,698.2	33.09809794	-103.57592356	18.05	-0.05	13.20	0.24
3254	1,698.7	33.09809217	-103.57592566	12.77	0.01	12.62	0.30
3255	1,699.3	33.09808649	-103.57592717	14.61	-0.01	12.54	0.26
3256	1,699.8	33.09808079	-103.57592875	12.66	0.00	12.93	0.31
3257	1,700.3	33.09807515	-103.57593058	16.95	-0.06	13.63	0.30
3258	1,700.8	33.09806954	-103.57593309	17.27	-0.04	13.91	0.35
3259	1,701.4	33.09806399	-103.57593730	19.65	-0.06	15.39	0.33
3260	1,701.9	33.09805975	-103.57594261	18.40	-0.01	16.68	0.35
3261	1,702.4	33.09805779	-103.57594976	19.26	-0.04	16.13	0.35
3262	1,702.9	33.09805820	-103.57595647	18.36	-0.02	16.48	0.37
3263	1,703.4	33.09806141	-103.57596266	20.27	-0.02	16.02	0.40
3264	1,704.0	33.09806591	-103.57596719	17.62	0.01	14.61	0.45
3265	1,704.5	33.09807146	-103.57597024	14.14	0.06	12.62	0.47
3266	1,705.0	33.09807761	-103.57597191	19.61	-0.02	14.53	0.33
3267	1,705.5	33.09808410	-103.57597272	14.06	0.07	13.05	0.38
3268	1,706.1	33.09809059	-103.57597291	20.47	-0.03	14.73	0.30
3269	1,706.6	33.09809707	-103.57597285	13.32	0.05	12.19	0.35
3270	1,707.1	33.09810342	-103.57597258	27.58	-0.13	15.47	0.19
3271	1,707.6	33.09810971	-103.57597225	14.69	0.06	12.03	0.37
3272	1,708.1	33.09811605	-103.57597188	19.61	-0.03	13.56	0.37
3273	1,708.7	33.09812242	-103.57597150	13.67	0.07	12.77	0.42
3274	1,709.2	33.09812861	-103.57597086	22.15	-0.06	13.71	0.29
3275	1,709.7	33.09813481	-103.57597024	14.92	0.02	12.03	0.36
3276	1,710.2	33.09814104	-103.57597017	18.75	-0.05	13.44	0.25
3277	1,710.8	33.09814720	-103.57597008	14.57	0.01	13.56	0.23
3278	1,711.3	33.09815275	-103.57596980	13.40	0.01	12.77	0.27
3279	1,711.8	33.09815839	-103.57596943	13.09	0.03	12.54	0.30
3280	1,712.3	33.09816437	-103.57596872	13.87	-0.01	12.58	0.26
3281	1,712.8	33.09817026	-103.57596802	14.84	0.03	13.52	0.30
3282	1,713.4	33.09817591	-103.57596737	16.60	-0.02	13.56	0.30
3283	1,713.9	33.09818169	-103.57596672	17.46	0.01	14.14	0.27
3284	1,714.4	33.09818768	-103.57596608	16.02	0.02	13.87	0.29
3285	1,714.9	33.09819368	-103.57596567	18.56	-0.01	14.61	0.25
3286	1,715.5	33.09819972	-103.57596552	14.96	0.02	13.52	0.29

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3287	1,716.0	33.09820548	-103.57596530	20.00	-0.05	14.73	0.22
3288	1,716.5	33.09821106	-103.57596502	14.53	0.02	12.70	0.27
3289	1,717.0	33.09821665	-103.57596466	20.74	-0.08	15.20	0.19
3290	1,717.5	33.09822223	-103.57596424	14.57	0.02	13.44	0.29
3291	1,718.1	33.09822791	-103.57596379	23.56	-0.11	15.20	0.14
3292	1,718.6	33.09823363	-103.57596332	17.93	-0.02	14.92	0.23
3293	1,719.1	33.09823951	-103.57596283	17.15	-0.05	14.06	0.23
3294	1,719.6	33.09824542	-103.57596233	17.07	-0.04	14.22	0.21
3295	1,720.1	33.09825121	-103.57596191	13.36	-0.01	13.44	0.21
3296	1,720.7	33.09825699	-103.57596149	20.08	-0.07	14.73	0.16
3297	1,721.2	33.09826274	-103.57596117	14.49	0.02	13.95	0.24
3298	1,721.7	33.09826847	-103.57596084	23.83	-0.10	15.59	0.15
3299	1,722.2	33.09827394	-103.57596045	16.25	0.00	13.75	0.25
3300	1,722.8	33.09827944	-103.57595998	21.72	-0.07	14.81	0.24
3301	1,723.3	33.09828521	-103.57595910	17.54	0.01	14.02	0.27
3302	1,723.8	33.09829098	-103.57595829	17.11	-0.01	13.75	0.28
3303	1,724.3	33.09829681	-103.57595770	19.06	-0.02	14.81	0.25
3304	1,724.9	33.09830250	-103.57595703	15.51	0.04	14.14	0.31
3305	1,725.4	33.09830793	-103.57595621	20.04	-0.02	14.45	0.29
3306	1,725.9	33.09831342	-103.57595544	13.75	0.09	13.59	0.40
3307	1,726.4	33.09831900	-103.57595475	27.73	-0.12	17.07	0.23
3308	1,726.9	33.09832456	-103.57595406	15.94	0.05	14.53	0.36
3309	1,727.5	33.09833010	-103.57595337	18.24	-0.02	15.23	0.29
3310	1,728.0	33.09833587	-103.57595282	13.32	0.03	13.20	0.29
3311	1,728.5	33.09834185	-103.57595235	14.53	-0.01	14.57	0.32
3312	1,729.0	33.09834763	-103.57595164	17.03	0.02	14.57	0.34
3313	1,729.6	33.09835333	-103.57595081	15.04	0.05	14.53	0.40
3314	1,730.1	33.09835930	-103.57595006	21.02	-0.01	16.95	0.39
3315	1,730.6	33.09836538	-103.57594934	22.77	-0.01	15.04	0.19
3316	1,731.1	33.09837098	-103.57594848	84.84	-1.63	10.00	-7.69
3317	1,731.6	33.09837648	-103.57594760	211.76	7.93	-152.66	-18.30
3318	1,732.2	33.09838154	-103.57594695	359.73	5.41	-63.48	2.86
3319	1,732.7	33.09838655	-103.57594633	288.28	1.28	-61.17	-7.44
3320	1,733.2	33.09838825	-103.57594624	229.96	0.92	-27.89	-4.10
3321	1,733.7	33.09838974	-103.57594622	189.30	0.97	-0.27	-2.37
3322	1,734.3	33.09838936	-103.57594688	184.14	0.97	6.76	-2.01
3323	1,734.8	33.09838906	-103.57594743	184.88	0.97	10.08	-1.98
3324	1,735.3	33.09838913	-103.57594744	186.02	0.96	9.57	-2.10
3325	1,735.8	33.09838919	-103.57594734	208.16	0.97	0.55	-2.52
3326	1,736.3	33.09838922	-103.57594697	213.91	0.93	-5.23	-2.80
3327	1,736.9	33.09838931	-103.57594655	220.86	0.95	-11.29	-3.02
3328	1,737.4	33.09838950	-103.57594607	228.28	1.05	-13.59	-3.05
3329	1,737.9	33.09839098	-103.57594599	210.08	1.10	0.74	-2.28
3330	1,738.4	33.09839411	-103.57594644	148.98	1.00	38.40	-0.09
3331	1,739.0	33.09839820	-103.57594691	110.00	1.52	50.74	2.38
3332	1,739.5	33.09840314	-103.57594738	71.56	0.49	38.56	1.54
3333	1,740.0	33.09840836	-103.57594734	50.63	0.06	37.38	0.39
3334	1,740.5	33.09841369	-103.57594697	37.34	0.00	33.44	0.39
3335	1,741.0	33.09841896	-103.57594644	33.36	-0.12	29.57	0.19
3336	1,741.6	33.09842419	-103.57594582	23.63	-0.02	24.45	0.20
3337	1,742.1	33.09842972	-103.57594557	25.16	-0.08	23.32	0.20
3338	1,742.6	33.09843536	-103.57594542	21.56	-0.02	21.60	0.24
3339	1,743.1	33.09844044	-103.57594543	21.37	-0.04	21.95	0.25
3340	1,743.7	33.09844541	-103.57594547	21.88	-0.03	23.71	0.26
3341	1,744.2	33.09845118	-103.57594540	22.93	-0.03	25.70	0.28
3342	1,744.7	33.09845699	-103.57594532	24.53	-0.04	26.52	0.28
3343	1,745.2	33.09846266	-103.57594518	22.66	0.00	27.62	0.31
3344	1,745.7	33.09846834	-103.57594503	30.82	-0.07	31.09	0.25
3345	1,746.3	33.09847410	-103.57594482	27.03	0.01	30.35	0.30
3346	1,746.8	33.09847987	-103.57594459	35.70	-0.10	31.52	0.21
3347	1,747.3	33.09848562	-103.57594429	27.23	0.01	29.34	0.28
3348	1,747.8	33.09849136	-103.57594395	28.56	-0.05	28.48	0.24

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3349	1,748.4	33.09849717	-103.57594351	23.83	0.00	25.63	0.28
3350	1,748.9	33.09850295	-103.57594325	23.71	-0.06	24.84	0.24
3351	1,749.4	33.09850866	-103.57594328	19.73	0.03	23.87	0.23
3352	1,749.9	33.09851444	-103.57594282	19.65	0.00	22.50	0.26
3353	1,750.4	33.09852031	-103.57594177	23.20	-0.01	24.18	0.25
3354	1,751.0	33.09852627	-103.57594114	23.91	0.00	25.78	0.26
3355	1,751.5	33.09853231	-103.57594088	26.09	-0.03	23.95	0.25
3356	1,752.0	33.09853848	-103.57594085	22.23	0.01	23.32	0.29
3357	1,752.5	33.09854475	-103.57594095	27.73	-0.07	26.56	0.22
3358	1,753.1	33.09855094	-103.57594117	21.68	0.00	24.96	0.29
3359	1,753.6	33.09855712	-103.57594143	27.73	-0.07	26.02	0.24
3360	1,754.1	33.09856290	-103.57594140	24.38	0.01	26.33	0.31
3361	1,754.6	33.09856858	-103.57594130	36.02	-0.14	30.39	0.19
3362	1,755.1	33.09857447	-103.57594119	28.91	-0.02	30.74	0.26
3363	1,755.7	33.09858041	-103.57594109	29.45	-0.03	30.74	0.20
3364	1,756.2	33.09858653	-103.57594151	26.41	0.01	29.53	0.28
3365	1,756.7	33.09859265	-103.57594193	31.25	-0.08	30.59	0.23
3366	1,757.2	33.09859854	-103.57594208	25.47	-0.01	28.59	0.27
3367	1,757.8	33.09860440	-103.57594226	26.99	-0.05	26.91	0.25
3368	1,758.3	33.09861009	-103.57594263	23.83	0.00	26.64	0.25
3369	1,758.8	33.09861585	-103.57594298	21.80	0.00	25.66	0.27
3370	1,759.3	33.09862186	-103.57594322	22.54	-0.02	26.37	0.28
3371	1,759.8	33.09862795	-103.57594338	20.20	0.01	25.74	0.32
3372	1,760.4	33.09863406	-103.57594334	25.86	-0.05	26.45	0.26
3373	1,760.9	33.09864018	-103.57594334	21.68	0.01	26.68	0.31
3374	1,761.4	33.09864624	-103.57594341	28.36	-0.07	27.58	0.24
3375	1,761.9	33.09865222	-103.57594340	25.04	0.01	26.37	0.35
3376	1,762.5	33.09865812	-103.57594329	32.62	-0.09	27.15	0.27
3377	1,763.0	33.09866392	-103.57594330	27.50	-0.03	28.71	0.29
3378	1,763.5	33.09866966	-103.57594342	28.13	-0.07	28.01	0.27
3379	1,764.0	33.09867518	-103.57594346	30.86	-0.05	28.87	0.24
3380	1,764.5	33.09868059	-103.57594347	26.64	-0.04	27.54	0.26
3381	1,765.1	33.09868602	-103.57594359	27.97	-0.03	28.24	0.27
3382	1,765.6	33.09869145	-103.57594374	23.56	0.01	26.80	0.31
3383	1,766.1	33.09869703	-103.57594457	22.77	-0.03	25.27	0.29
3384	1,766.6	33.09870263	-103.57594556	20.63	0.02	24.38	0.31
3385	1,767.1	33.09870838	-103.57594556	25.86	-0.06	25.04	0.25
3386	1,767.7	33.09871415	-103.57594545	19.96	0.03	24.10	0.29
3387	1,768.2	33.09871972	-103.57594523	24.57	-0.05	23.28	0.24
3388	1,768.7	33.09872532	-103.57594503	19.41	0.02	21.76	0.26
3389	1,769.2	33.09873120	-103.57594527	20.86	-0.03	21.72	0.25
3390	1,769.8	33.09873710	-103.57594550	20.90	-0.01	22.07	0.24
3391	1,770.3	33.09874300	-103.57594570	17.54	0.02	20.82	0.28
3392	1,770.8	33.09874893	-103.57594589	24.61	-0.05	22.58	0.21
3393	1,771.3	33.09875492	-103.57594604	17.97	0.04	21.13	0.25
3394	1,771.9	33.09876080	-103.57594629	23.05	-0.06	22.50	0.19
3395	1,772.4	33.09876647	-103.57594678	17.73	0.04	21.13	0.25
3396	1,772.9	33.09877207	-103.57594727	21.80	-0.04	21.25	0.22
3397	1,773.4	33.09877756	-103.57594777	17.50	0.02	21.02	0.27
3398	1,773.9	33.09878295	-103.57594840	24.14	-0.06	22.70	0.21
3399	1,774.5	33.09878818	-103.57594916	18.67	0.05	22.23	0.27
3400	1,775.0	33.09879351	-103.57594986	21.17	0.00	23.95	0.28
3401	1,775.5	33.09879890	-103.57595053	21.99	0.06	25.82	0.29
3402	1,776.0	33.09880446	-103.57595105	25.00	0.02	26.25	0.28
3403	1,776.6	33.09881007	-103.57595150	29.73	-0.02	28.44	0.25
3404	1,777.1	33.09881588	-103.57595173	27.03	0.03	29.57	0.30
3405	1,777.6	33.09882173	-103.57595189	34.30	-0.05	30.51	0.24
3406	1,778.1	33.09882724	-103.57595223	26.76	0.03	29.10	0.32
3407	1,778.6	33.09883269	-103.57595261	28.56	-0.04	28.44	0.26
3408	1,779.2	33.09883807	-103.57595303	22.73	0.01	24.61	0.30
3409	1,779.7	33.09884343	-103.57595345	23.75	-0.06	23.48	0.25
3410	1,780.2	33.09884904	-103.57595377	19.30	0.01	21.09	0.28

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3411	1,780.7	33.09885469	-103.57595414	17.34	-0.01	18.48	0.30
3412	1,781.3	33.09886049	-103.57595501	18.20	-0.01	17.07	0.28
3413	1,781.8	33.09886634	-103.57595574	15.04	0.01	15.63	0.34
3414	1,782.3	33.09887182	-103.57595574	18.91	-0.04	15.90	0.27
3415	1,782.8	33.09887740	-103.57595601	14.22	0.03	13.83	0.31
3416	1,783.3	33.09888290	-103.57595702	19.69	-0.07	15.35	0.24
3417	1,783.9	33.09888816	-103.57595848	13.56	0.02	13.87	0.30
3418	1,784.4	33.09889299	-103.57596077	16.06	-0.04	13.48	0.27
3419	1,784.9	33.09889696	-103.57596423	12.66	0.01	12.46	0.30
3420	1,785.4	33.09889975	-103.57596924	16.09	-0.05	12.85	0.24
3421	1,786.0	33.09890059	-103.57597486	12.15	0.00	12.38	0.31
3422	1,786.5	33.09889961	-103.57598105	14.77	-0.05	12.73	0.25
3423	1,787.0	33.09889704	-103.57598669	12.97	0.01	12.62	0.32
3424	1,787.5	33.09889340	-103.57599197	18.56	-0.04	13.67	0.26
3425	1,788.0	33.09888915	-103.57599654	14.06	0.00	13.48	0.30
3426	1,788.6	33.09888460	-103.57600079	16.17	-0.03	13.40	0.26
3427	1,789.1	33.09887942	-103.57600449	16.99	-0.01	14.45	0.28
3428	1,789.6	33.09887407	-103.57600800	15.27	0.01	15.27	0.31
3429	1,790.1	33.09886861	-103.57601087	18.44	0.00	16.33	0.28
3430	1,790.7	33.09886313	-103.57601363	17.11	0.02	17.62	0.32
3431	1,791.2	33.09885728	-103.57601593	24.53	-0.05	19.88	0.28
3432	1,791.7	33.09885140	-103.57601818	18.91	0.00	21.37	0.35
3433	1,792.2	33.09884561	-103.57602016	24.73	-0.06	24.30	0.27
3434	1,792.7	33.09883985	-103.57602210	23.79	0.02	25.39	0.32
3435	1,793.3	33.09883436	-103.57602381	29.38	-0.05	27.11	0.27
3436	1,793.8	33.09882879	-103.57602548	27.97	0.00	29.81	0.31
3437	1,794.3	33.09882283	-103.57602700	35.43	-0.05	34.81	0.26
3438	1,794.8	33.09881694	-103.57602848	38.28	0.01	38.83	0.29
3439	1,795.4	33.09881117	-103.57602988	43.05	-0.01	42.50	0.29
3440	1,795.9	33.09880539	-103.57603110	46.68	0.00	41.06	0.26
3441	1,796.4	33.09879954	-103.57603202	51.68	0.00	51.13	0.32
3442	1,796.9	33.09879357	-103.57603320	60.16	-0.03	54.26	0.28
3443	1,797.4	33.09878742	-103.57603470	70.08	0.03	53.56	0.30
3444	1,798.0	33.09878140	-103.57603600	85.82	-0.03	62.89	0.27
3445	1,798.5	33.09877550	-103.57603712	84.57	0.02	67.15	0.31
3446	1,799.0	33.09876958	-103.57603813	94.38	-0.06	73.24	0.23
3447	1,799.5	33.09876366	-103.57603907	89.02	0.03	74.49	0.30
3448	1,800.1	33.09875783	-103.57603999	93.63	-0.04	78.16	0.24
3449	1,800.6	33.09875201	-103.57604089	77.42	0.01	72.23	0.30
3450	1,801.1	33.09874607	-103.57604150	74.65	-0.04	67.77	0.26
3451	1,801.6	33.09874009	-103.57604202	67.31	0.02	62.07	0.27
3452	1,802.1	33.09873413	-103.57604248	65.55	-0.01	57.81	0.29
3453	1,802.7	33.09872815	-103.57604292	59.88	0.01	60.78	0.29
3454	1,803.2	33.09872200	-103.57604330	51.33	0.00	47.85	0.27
3455	1,803.7	33.09871586	-103.57604368	46.91	0.00	44.96	0.26
3456	1,804.2	33.09870949	-103.57604392	41.52	0.01	47.34	0.27
3457	1,804.8	33.09870314	-103.57604416	43.91	-0.02	46.33	0.25
3458	1,805.3	33.09869686	-103.57604432	41.84	0.01	38.52	0.25
3459	1,805.8	33.09869059	-103.57604442	49.73	-0.02	40.00	0.24
3460	1,806.3	33.09868434	-103.57604431	47.50	0.02	40.82	0.26
3461	1,806.8	33.09867800	-103.57604423	52.62	-0.04	43.87	0.22
3462	1,807.4	33.09867166	-103.57604423	42.66	0.04	36.88	0.27
3463	1,807.9	33.09866531	-103.57604437	50.04	-0.07	37.73	0.20
3464	1,808.4	33.09865904	-103.57604471	36.91	0.04	34.92	0.28
3465	1,808.9	33.09865277	-103.57604481	41.76	-0.08	34.14	0.21
3466	1,809.5	33.09864652	-103.57604463	31.37	0.04	33.95	0.30
3467	1,810.0	33.09864029	-103.57604448	39.06	-0.04	35.39	0.23
3468	1,810.5	33.09863407	-103.57604437	38.83	0.02	34.69	0.28
3469	1,811.0	33.09862785	-103.57604416	48.01	-0.07	32.46	0.18
3470	1,811.5	33.09862167	-103.57604391	34.84	0.02	30.12	0.27
3471	1,812.1	33.09861566	-103.57604379	31.09	-0.02	31.13	0.26
3472	1,812.6	33.09860974	-103.57604373	25.39	0.04	30.47	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3473	1,813.1	33.09860360	-103.57604336	30.39	-0.06	29.49	0.23
3474	1,813.6	33.09859742	-103.57604293	23.32	0.02	26.37	0.31
3475	1,814.1	33.09859158	-103.57604229	21.56	0.00	23.98	0.30
3476	1,814.7	33.09858581	-103.57604162	20.82	0.02	23.01	0.28
3477	1,815.2	33.09857986	-103.57604053	18.13	0.01	20.51	0.29
3478	1,815.7	33.09857389	-103.57603942	16.68	0.01	18.98	0.29
3479	1,816.2	33.09856774	-103.57603841	15.74	0.01	18.09	0.32
3480	1,816.8	33.09856160	-103.57603741	17.81	0.00	18.09	0.27
3481	1,817.3	33.09855560	-103.57603646	14.22	0.04	17.62	0.29
3482	1,817.8	33.09854962	-103.57603566	18.01	-0.01	17.85	0.25
3483	1,818.3	33.09854367	-103.57603531	14.26	0.03	16.02	0.30
3484	1,818.9	33.09853762	-103.57603483	20.04	-0.04	17.34	0.23
3485	1,819.4	33.09853138	-103.57603409	15.35	0.03	16.56	0.28
3486	1,819.9	33.09852523	-103.57603341	24.30	-0.08	18.91	0.19
3487	1,820.4	33.09851917	-103.57603281	16.91	0.03	17.70	0.30
3488	1,820.9	33.09851323	-103.57603205	21.48	-0.05	17.97	0.22
3489	1,821.5	33.09850742	-103.57603113	15.86	0.03	17.31	0.27
3490	1,822.0	33.09850154	-103.57603026	21.64	-0.06	16.99	0.21
3491	1,822.5	33.09849558	-103.57602945	16.52	0.03	16.80	0.26
3492	1,823.0	33.09848940	-103.57602880	17.11	0.00	17.07	0.27
3493	1,823.6	33.09848308	-103.57602824	20.00	-0.01	16.80	0.26
3494	1,824.1	33.09847700	-103.57602733	16.37	-0.01	15.78	0.30
3495	1,824.6	33.09847096	-103.57602631	15.00	-0.01	16.37	0.25
3496	1,825.1	33.09846479	-103.57602548	12.93	0.01	14.77	0.27
3497	1,825.6	33.09845857	-103.57602470	16.41	-0.03	15.66	0.24
3498	1,826.2	33.09845218	-103.57602409	13.20	0.02	15.08	0.28
3499	1,826.7	33.09844578	-103.57602349	15.66	-0.02	15.43	0.28
3500	1,827.2	33.09843949	-103.57602307	13.09	0.03	15.39	0.30
3501	1,827.7	33.09843322	-103.57602264	19.22	-0.04	15.82	0.23
3502	1,828.3	33.09842744	-103.57602218	13.56	0.05	14.88	0.31
3503	1,828.8	33.09842161	-103.57602178	31.95	-0.17	19.10	0.09
3504	1,829.3	33.09841603	-103.57602171	17.77	0.00	15.59	0.28
3505	1,829.8	33.09841024	-103.57602176	19.18	-0.04	16.02	0.23
3506	1,830.3	33.09840401	-103.57602215	14.65	0.06	14.57	0.32
3507	1,830.9	33.09839855	-103.57602343	7.15	0.11	13.44	0.37
3508	1,831.4	33.09839456	-103.57602642	8.95	0.12	13.63	0.40
3509	1,831.9	33.09839181	-103.57602957	14.14	0.03	14.10	0.33
3510	1,832.4	33.09839072	-103.57603294	18.09	-0.01	14.88	0.26
3511	1,833.0	33.09838961	-103.57603654	13.20	0.07	14.06	0.31
3512	1,833.5	33.09838850	-103.57604037	14.22	0.02	14.77	0.30
3513	1,834.0	33.09838652	-103.57604347	17.27	0.00	15.51	0.31
3514	1,834.5	33.09838396	-103.57604611	13.71	0.04	15.31	0.34
3515	1,835.0	33.09837979	-103.57604734	15.12	-0.02	15.63	0.26
3516	1,835.6	33.09837487	-103.57604792	12.85	0.01	15.20	0.31
3517	1,836.1	33.09836909	-103.57604730	16.48	-0.04	15.39	0.28
3518	1,836.6	33.09836303	-103.57604631	14.26	0.04	14.61	0.32
3519	1,837.1	33.09835710	-103.57604507	15.39	0.00	14.41	0.32
3520	1,837.7	33.09835120	-103.57604378	13.95	0.04	14.22	0.39
3521	1,838.2	33.09834501	-103.57604268	16.33	0.00	14.38	0.41
3522	1,838.7	33.09833882	-103.57604159	17.07	0.03	15.08	0.39
3523	1,839.2	33.09833292	-103.57604070	15.23	0.03	15.00	0.40
3524	1,839.7	33.09832711	-103.57603970	24.45	-0.10	16.56	0.28
3525	1,840.3	33.09832187	-103.57603777	14.53	-0.01	14.02	0.36
3526	1,840.8	33.09831651	-103.57603569	12.77	-0.02	13.83	0.36
3527	1,841.3	33.09831067	-103.57603304	11.91	0.01	13.79	0.39
3528	1,841.8	33.09830483	-103.57603038	14.49	-0.03	13.71	0.29
3529	1,842.4	33.09829899	-103.57602772	12.38	0.01	13.32	0.29
3530	1,842.9	33.09829311	-103.57602525	15.94	-0.03	13.40	0.27
3531	1,843.4	33.09828714	-103.57602310	14.06	0.03	13.83	0.29
3532	1,843.9	33.09828126	-103.57602097	14.88	-0.03	13.16	0.26
3533	1,844.4	33.09827545	-103.57601882	14.14	0.00	13.67	0.24
3534	1,845.0	33.09826982	-103.57601610	14.61	-0.03	13.48	0.24

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3535	1,845.5	33.09826434	-103.57601285	15.43	-0.03	13.63	0.24
3536	1,846.0	33.09825897	-103.57600900	14.02	-0.02	13.44	0.25
3537	1,846.5	33.09825370	-103.57600479	15.86	-0.04	14.30	0.20
3538	1,847.1	33.09824862	-103.57600000	13.63	-0.01	14.14	0.18
3539	1,847.6	33.09824362	-103.57599499	18.91	-0.01	13.98	0.17
3540	1,848.1	33.09823917	-103.57598986	13.63	0.01	14.18	0.20
3541	1,848.6	33.09823488	-103.57598472	18.05	-0.08	15.74	0.16
3542	1,849.1	33.09823103	-103.57597879	12.03	-0.01	13.05	0.21
3543	1,849.7	33.09822727	-103.57597276	11.60	0.01	13.28	0.22
3544	1,850.2	33.09822414	-103.57596690	11.41	0.00	13.20	0.24
3545	1,850.7	33.09822104	-103.57596103	16.64	-0.06	14.14	0.20
3546	1,851.2	33.09821796	-103.57595475	12.42	-0.01	13.67	0.25
3547	1,851.8	33.09821487	-103.57594850	16.60	-0.05	14.61	0.23
3548	1,852.3	33.09821162	-103.57594217	12.77	-0.02	13.59	0.28
3549	1,852.8	33.09820832	-103.57593580	17.77	-0.07	14.53	0.24
3550	1,853.3	33.09820485	-103.57592938	13.20	0.02	13.95	0.28
3551	1,853.8	33.09820140	-103.57592278	19.22	-0.05	16.13	0.23
3552	1,854.4	33.09819813	-103.57591606	15.78	0.00	15.59	0.27
3553	1,854.9	33.09819484	-103.57590938	17.03	-0.03	15.74	0.24
3554	1,855.4	33.09819161	-103.57590293	15.82	0.01	15.98	0.25
3555	1,855.9	33.09818816	-103.57589655	17.46	-0.02	16.52	0.24
3556	1,856.5	33.09818444	-103.57589021	16.09	0.02	17.15	0.25
3557	1,857.0	33.09818104	-103.57588399	17.34	-0.01	16.91	0.24
3558	1,857.5	33.09817791	-103.57587789	15.86	0.03	16.37	0.22
3559	1,858.0	33.09817477	-103.57587157	16.33	0.00	16.52	0.23
3560	1,858.5	33.09817162	-103.57586512	15.27	0.04	17.11	0.22
3561	1,859.1	33.09816824	-103.57585852	13.83	0.02	15.94	0.25
3562	1,859.6	33.09816476	-103.57585181	14.06	0.04	15.66	0.28
3563	1,860.1	33.09816141	-103.57584527	17.38	-0.03	15.12	0.24
3564	1,860.6	33.09815809	-103.57583872	15.86	-0.01	16.02	0.26
3565	1,861.1	33.09815486	-103.57583241	17.38	-0.04	15.98	0.26
3566	1,861.7	33.09815164	-103.57582612	16.68	-0.02	15.63	0.27
3567	1,862.2	33.09814840	-103.57581916	17.07	-0.06	14.96	0.27
3568	1,862.7	33.09814512	-103.57581220	15.31	-0.05	15.20	0.33
3569	1,863.2	33.09814145	-103.57580593	22.54	-0.11	16.76	0.26
3570	1,863.8	33.09813783	-103.57579961	17.50	-0.03	15.66	0.33
3571	1,864.3	33.09813462	-103.57579325	18.28	-0.07	16.48	0.32
3572	1,864.8	33.09813152	-103.57578678	15.98	-0.04	16.02	0.35
3573	1,865.3	33.09812879	-103.57578001	21.13	-0.01	15.51	0.16
3574	1,865.9	33.09812605	-103.57577325	16.76	-0.04	16.13	0.14
3575	1,866.4	33.09812327	-103.57576647	18.36	-0.06	17.58	0.24
3576	1,866.9	33.09812047	-103.57575989	17.50	-0.02	18.52	0.29
3577	1,867.4	33.09811761	-103.57575358	21.13	-0.07	20.20	0.29
3578	1,867.9	33.09811472	-103.57574706	20.55	-0.04	21.60	0.28
3579	1,868.5	33.09811178	-103.57574031	23.24	-0.07	24.49	0.27
3580	1,869.0	33.09810890	-103.57573338	25.51	-0.16	25.08	0.29
3581	1,869.5	33.09810605	-103.57572632	25.63	-0.11	27.03	0.95
3582	1,870.0	33.09810310	-103.57571915	9.41	0.34	30.00	1.49
3583	1,870.6	33.09810011	-103.57571192	61.72	0.04	67.15	0.57
3584	1,871.1	33.09809722	-103.57570509	49.41	0.04	-52.70	-0.06
3585	1,871.6	33.09809438	-103.57569843	52.58	-0.01	15.12	0.19
3586	1,872.1	33.09809147	-103.57569172	41.06	-0.05	53.59	0.27
3587	1,872.6	33.09808854	-103.57568499	31.72	-0.02	45.20	0.33
3588	1,873.2	33.09808553	-103.57567875	29.69	-0.05	36.72	0.32
3589	1,873.7	33.09808252	-103.57567255	27.54	-0.03	30.16	0.32
3590	1,874.2	33.09807943	-103.57566615	31.68	-0.09	32.19	0.26
3591	1,874.7	33.09807640	-103.57565975	27.42	-0.03	30.20	0.38
3592	1,875.3	33.09807388	-103.57565337	33.63	-0.13	28.44	0.30
3593	1,875.8	33.09807154	-103.57564680	27.50	-0.05	26.95	0.38
3594	1,876.3	33.09807011	-103.57563993	30.39	-0.11	28.05	0.33
3595	1,876.8	33.09806857	-103.57563288	26.68	-0.05	27.38	0.42
3596	1,877.3	33.09806675	-103.57562571	34.02	-0.05	28.71	0.34

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3597	1,877.9	33.09806483	-103.57561858	40.27	-0.05	28.67	0.28
3598	1,878.4	33.09806267	-103.57561146	33.44	-0.12	27.93	0.27
3599	1,878.9	33.09806062	-103.57560451	23.01	-0.03	25.31	0.33
3600	1,879.4	33.09805873	-103.57559778	22.50	-0.06	23.20	0.28
3601	1,880.0	33.09805709	-103.57559101	18.40	-0.02	21.09	0.30
3602	1,880.5	33.09805570	-103.57558426	21.95	-0.08	21.17	0.24
3603	1,881.0	33.09805435	-103.57557787	17.97	-0.03	20.00	0.28
3604	1,881.5	33.09805303	-103.57557176	22.66	-0.10	20.35	0.28
3605	1,882.0	33.09805209	-103.57556573	20.78	-0.04	22.19	0.31
3606	1,882.6	33.09805133	-103.57555974	20.20	-0.05	21.29	0.30
3607	1,883.1	33.09805079	-103.57555476	19.61	-0.01	21.21	0.33
3608	1,883.6	33.09805032	-103.57555010	20.55	0.00	22.23	0.34
3609	1,884.1	33.09805011	-103.57554586	26.52	-0.08	23.71	0.27
3610	1,884.7	33.09804994	-103.57554170	21.02	0.04	23.09	0.32
3611	1,885.2	33.09805107	-103.57553761	24.38	-0.02	24.14	0.32
3612	1,885.7	33.09805228	-103.57553355	24.49	-0.01	25.74	0.32
3613	1,886.2	33.09805283	-103.57553050	22.70	0.05	25.90	0.36
3614	1,886.7	33.09805330	-103.57552763	26.95	-0.04	27.19	0.35
3615	1,887.3	33.09805313	-103.57552620	23.09	0.06	28.52	0.33
3616	1,887.8	33.09805299	-103.57552496	25.55	0.04	28.98	0.35
3617	1,888.3	33.09805301	-103.57552455	26.84	0.02	28.71	0.34
3618	1,888.8	33.09805304	-103.57552417	27.11	0.04	28.56	0.34
3619	1,889.4	33.09805310	-103.57552389	27.11	0.04	29.14	0.38
3620	1,889.9	33.09805317	-103.57552375	27.15	0.02	28.91	0.38
3621	1,890.4	33.09805325	-103.57552388	28.16	-0.01	29.26	0.33
3622	1,890.9	33.09805345	-103.57552401	27.70	-0.02	29.34	0.32
3623	1,891.4	33.09805383	-103.57552412	27.58	-0.04	29.14	0.33
3624	1,892.0	33.09805374	-103.57552418	27.73	-0.04	28.87	0.31
3625	1,892.5	33.09805323	-103.57552421	27.58	-0.01	29.14	0.29
3626	1,893.0	33.09805292	-103.57552432	27.19	0.00	28.32	0.28
3627	1,893.5	33.09805274	-103.57552448	27.89	0.01	29.34	0.30
3628	1,894.1	33.09805273	-103.57552454	27.97	0.03	29.34	0.33
3629	1,894.6	33.09805277	-103.57552456	28.05	0.03	29.14	0.36
3630	1,895.1	33.09805280	-103.57552444	27.77	0.02	28.83	0.34
3631	1,895.6	33.09805281	-103.57552428	28.24	0.03	28.83	0.36
3632	1,896.1	33.09805257	-103.57552128	29.41	0.03	29.02	0.36
3633	1,896.7	33.09805230	-103.57551785	28.67	0.01	28.36	0.27
3634	1,897.2	33.09805012	-103.57551446	29.38	-0.05	29.30	0.24
3635	1,897.7	33.09804782	-103.57551103	27.27	0.02	27.70	0.30
3636	1,898.2	33.09804519	-103.57550714	28.98	-0.05	27.07	0.25
3637	1,898.8	33.09804257	-103.57550314	27.66	-0.02	27.54	0.23
3638	1,899.3	33.09804005	-103.57549840	25.04	0.01	27.54	0.29
3639	1,899.8	33.09803734	-103.57549371	27.73	-0.06	27.50	0.23
3640	1,900.3	33.09803403	-103.57548929	23.67	0.01	27.23	0.30
3641	1,900.8	33.09803085	-103.57548518	27.81	-0.06	28.36	0.27
3642	1,901.4	33.09802815	-103.57548201	27.27	-0.01	28.48	0.28
3643	1,901.9	33.09802565	-103.57547892	28.16	-0.04	28.79	0.28
3644	1,902.4	33.09802351	-103.57547603	29.02	-0.02	31.84	0.28
3645	1,902.9	33.09802135	-103.57547192	32.38	0.01	33.13	0.29
3646	1,903.5	33.09801918	-103.57546646	37.27	-0.03	31.56	0.25
3647	1,904.0	33.09801631	-103.57546110	39.18	0.00	29.49	0.26
3648	1,904.5	33.09801286	-103.57545582	35.55	-0.02	28.71	0.27
3649	1,905.0	33.09800950	-103.57545018	33.01	0.00	29.26	0.29
3650	1,905.5	33.09800620	-103.57544433	33.56	-0.02	27.93	0.28
3651	1,906.1	33.09800299	-103.57543798	34.65	-0.01	27.23	0.27
3652	1,906.6	33.09799981	-103.57543141	31.64	0.00	26.41	0.30
3653	1,907.1	33.09799632	-103.57542523	31.84	-0.01	28.24	0.30
3654	1,907.6	33.09799277	-103.57541915	30.23	0.01	28.05	0.33
3655	1,908.1	33.09798905	-103.57541315	34.81	-0.02	28.95	0.32
3656	1,908.7	33.09798530	-103.57540716	32.77	0.01	30.94	0.35
3657	1,909.2	33.09798186	-103.57540230	36.09	-0.02	34.22	0.34
3658	1,909.7	33.09797851	-103.57539774	35.35	0.00	35.12	0.36

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3659	1,910.2	33.09797610	-103.57539650	35.63	0.00	35.74	0.44
3660	1,910.8	33.09797407	-103.57539545	33.75	0.00	35.55	0.46
3661	1,911.3	33.09797415	-103.57539546	35.00	0.02	35.63	0.46
3662	1,911.8	33.09797422	-103.57539546	34.57	0.02	34.61	0.47
3663	1,912.3	33.09797430	-103.57539546	33.67	0.01	35.00	0.45
3664	1,912.9	33.09797436	-103.57539541	34.57	0.02	35.39	0.47
3665	1,913.4	33.09797438	-103.57539522	35.23	0.02	35.20	0.47
3666	1,913.9	33.09797453	-103.57539473	34.57	0.02	35.98	0.48
3667	1,914.4	33.09797488	-103.57539377	34.92	0.02	35.27	0.47
3668	1,914.9	33.09797480	-103.57539103	35.31	0.02	35.74	0.45
3669	1,915.5	33.09797427	-103.57538647	36.84	-0.02	35.74	0.40
3670	1,916.0	33.09797263	-103.57538108	38.05	0.01	34.22	0.46
3671	1,916.5	33.09797016	-103.57537510	36.09	0.01	33.44	0.49
3672	1,917.0	33.09796727	-103.57536893	34.96	-0.01	35.31	0.47
3673	1,917.6	33.09796416	-103.57536267	32.07	0.00	34.53	0.46
3674	1,918.1	33.09796121	-103.57535639	35.47	-0.04	34.30	0.40
3675	1,918.6	33.09795833	-103.57535013	31.17	0.00	33.63	0.42
3676	1,919.1	33.09795571	-103.57534403	34.88	-0.04	32.81	0.34
3677	1,919.6	33.09795315	-103.57533796	30.43	0.02	30.90	0.35
3678	1,920.2	33.09794998	-103.57533215	33.91	-0.05	32.07	0.26
3679	1,920.7	33.09794676	-103.57532637	30.31	0.01	31.09	0.32
3680	1,921.2	33.09794332	-103.57532078	35.66	-0.08	31.99	0.27
3681	1,921.7	33.09793991	-103.57531523	29.41	-0.01	30.00	0.29
3682	1,922.3	33.09793660	-103.57530988	38.20	-0.11	34.02	0.19
3683	1,922.8	33.09793339	-103.57530505	36.64	-0.02	37.38	0.24
3684	1,923.3	33.09793096	-103.57530304	38.09	-0.02	35.04	0.29
3685	1,923.8	33.09792912	-103.57530140	42.50	-0.03	34.02	0.30
3686	1,924.3	33.09792912	-103.57530092	46.02	-0.01	33.36	0.29
3687	1,924.9	33.09792917	-103.57530058	45.43	0.01	32.62	0.29
3688	1,925.4	33.09792928	-103.57530052	45.63	0.01	31.91	0.30
3689	1,925.9	33.09792930	-103.57530050	46.29	0.00	31.72	0.31
3690	1,926.4	33.09792918	-103.57530055	47.11	0.01	31.48	0.30
3691	1,927.0	33.09792917	-103.57529861	47.34	0.02	31.48	0.30
3692	1,927.5	33.09792927	-103.57529478	47.54	0.04	30.55	0.28
3693	1,928.0	33.09792797	-103.57529007	57.34	-0.03	38.09	0.20
3694	1,928.5	33.09792570	-103.57528476	63.67	0.00	56.29	0.24
3695	1,929.0	33.09792312	-103.57527898	70.35	-0.01	59.81	0.24
3696	1,929.6	33.09792039	-103.57527299	77.85	0.00	59.61	0.24
3697	1,930.1	33.09791763	-103.57526696	77.66	-0.01	52.15	0.26
3698	1,930.6	33.09791486	-103.57526092	88.20	-0.03	79.69	0.23
3699	1,931.1	33.09791223	-103.57525421	82.38	-0.01	79.84	0.25
3700	1,931.6	33.09790961	-103.57524736	91.84	-0.03	70.55	0.24
3701	1,932.2	33.09790682	-103.57524073	77.77	0.01	56.72	0.26
3702	1,932.7	33.09790402	-103.57523410	82.19	-0.06	54.96	0.22
3703	1,933.2	33.09790115	-103.57522735	69.26	0.01	51.21	0.27
3704	1,933.7	33.09789829	-103.57522060	73.28	-0.06	54.84	0.25
3705	1,934.3	33.09789560	-103.57521383	62.27	-0.02	56.56	0.26
3706	1,934.8	33.09789288	-103.57520709	71.68	-0.05	59.57	0.25
3707	1,935.3	33.09789009	-103.57520052	70.78	-0.02	50.08	0.26
3708	1,935.8	33.09788723	-103.57519410	82.89	-0.02	50.23	0.23
3709	1,936.4	33.09788420	-103.57518810	95.27	-0.01	73.16	0.32
3710	1,936.9	33.09788128	-103.57518225	109.45	-0.12	68.40	0.21
3711	1,937.4	33.09787855	-103.57517669	118.91	-0.05	75.16	0.35
3712	1,937.9	33.09787662	-103.57517220	117.97	-0.07	88.87	0.38
3713	1,938.4	33.09787569	-103.57516903	118.56	-0.07	95.23	0.39
3714	1,939.0	33.09787514	-103.57516780	104.22	-0.04	92.31	0.35
3715	1,939.5	33.09787491	-103.57516827	108.67	-0.05	93.83	0.36
3716	1,940.0	33.09787390	-103.57516617	117.89	-0.06	95.39	0.36
3717	1,940.5	33.09787237	-103.57516242	113.91	-0.10	92.31	0.29
3718	1,941.1	33.09787040	-103.57515735	98.79	-0.11	75.63	0.30
3719	1,941.6	33.09786824	-103.57515173	68.05	-0.11	61.37	0.32
3720	1,942.1	33.09786639	-103.57514555	52.77	-0.10	58.05	0.32

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3721	1,942.6	33.09786462	-103.57513922	44.38	-0.09	51.99	0.33
3722	1,943.1	33.09786269	-103.57513310	44.65	-0.12	46.68	0.32
3723	1,943.7	33.09786075	-103.57512704	38.28	-0.06	40.43	0.38
3724	1,944.2	33.09785844	-103.57512102	39.77	-0.13	37.77	0.31
3725	1,944.7	33.09785612	-103.57511501	34.02	-0.07	34.73	0.38
3726	1,945.2	33.09785379	-103.57510922	43.63	-0.19	35.00	0.26
3727	1,945.7	33.09785150	-103.57510341	34.61	-0.07	32.70	0.37
3728	1,946.3	33.09784948	-103.57509742	34.88	-0.14	30.23	0.30
3729	1,946.8	33.09784768	-103.57509159	28.36	-0.07	27.38	0.33
3730	1,947.3	33.09784670	-103.57508639	28.56	-0.15	23.71	0.32
3731	1,947.8	33.09784675	-103.57508212	25.20	-0.12	21.52	0.32
3732	1,948.4	33.09784907	-103.57508018	21.25	-0.10	21.06	0.28
3733	1,948.9	33.09785220	-103.57507975	27.03	-0.10	25.39	0.32
3734	1,949.4	33.09785660	-103.57508186	32.15	-0.08	30.39	0.35
3735	1,949.9	33.09786100	-103.57508516	41.68	-0.12	40.51	0.28
3736	1,950.5	33.09786542	-103.57508981	43.91	-0.08	47.97	0.33
3737	1,951.0	33.09786964	-103.57509467	52.77	-0.15	52.46	0.25
3738	1,951.5	33.09787368	-103.57509968	51.88	-0.06	56.72	0.37
3739	1,952.0	33.09787750	-103.57510472	64.88	-0.16	63.28	0.27
3740	1,952.5	33.09788116	-103.57510975	70.98	-0.07	72.58	0.33
3741	1,953.1	33.09788471	-103.57511560	90.47	-0.12	69.61	0.26
3742	1,953.6	33.09788821	-103.57512174	98.83	-0.04	74.10	0.30
3743	1,954.1	33.09789183	-103.57512781	104.38	-0.04	89.41	0.26
3744	1,954.6	33.09789548	-103.57513386	105.12	-0.02	98.79	0.28
3745	1,955.1	33.09789907	-103.57513989	101.06	-0.05	92.42	0.29
3746	1,955.7	33.09790264	-103.57514592	105.16	-0.03	95.47	0.29
3747	1,956.2	33.09790588	-103.57515223	106.13	-0.06	91.88	0.29
3748	1,956.7	33.09790909	-103.57515853	112.19	-0.04	99.41	0.30
3749	1,957.2	33.09791214	-103.57516472	109.41	-0.04	101.25	0.31
3750	1,957.8	33.09791516	-103.57517090	115.16	-0.04	100.98	0.30
3751	1,958.3	33.09791793	-103.57517708	110.23	-0.03	95.47	0.34
3752	1,958.8	33.09792073	-103.57518324	116.37	-0.08	96.52	0.31
3753	1,959.3	33.09792361	-103.57518929	111.95	-0.03	97.11	0.33
3754	1,959.8	33.09792658	-103.57519537	118.83	-0.08	94.38	0.28
3755	1,960.4	33.09792973	-103.57520149	112.03	-0.01	92.77	0.30
3756	1,960.9	33.09793281	-103.57520739	108.91	-0.04	92.23	0.28
3757	1,961.4	33.09793577	-103.57521294	102.58	-0.02	88.32	0.30
3758	1,961.9	33.09793865	-103.57521877	108.87	-0.10	86.25	0.23
3759	1,962.5	33.09794143	-103.57522491	109.18	0.00	92.23	0.31
3760	1,963.0	33.09794410	-103.57523103	112.31	-0.08	91.25	0.24
3761	1,963.5	33.09794668	-103.57523713	108.32	-0.02	86.95	0.30
3762	1,964.0	33.09794922	-103.57524340	106.06	-0.07	85.63	0.27
3763	1,964.6	33.09795175	-103.57524979	109.18	-0.02	89.34	0.30
3764	1,965.1	33.09795454	-103.57525640	109.10	-0.03	89.69	0.31
3765	1,965.6	33.09795743	-103.57526309	117.46	-0.04	91.17	0.31
3766	1,966.1	33.09796054	-103.57526958	112.85	-0.03	91.09	0.34
3767	1,966.6	33.09796371	-103.57527604	108.83	0.02	92.81	0.34
3768	1,967.2	33.09796709	-103.57528252	112.62	-0.01	90.59	0.44
3769	1,967.7	33.09797050	-103.57528902	114.41	-0.02	92.42	0.41
3770	1,968.2	33.09797362	-103.57529566	112.54	-0.01	92.34	0.38
3771	1,968.7	33.09797672	-103.57530233	115.08	-0.02	91.13	0.32
3772	1,969.2	33.09797962	-103.57530942	110.04	-0.02	89.06	0.31
3773	1,969.8	33.09798262	-103.57531663	110.47	-0.03	92.15	0.28
3774	1,970.3	33.09798557	-103.57532336	104.26	-0.01	92.23	0.30
3775	1,970.8	33.09798860	-103.57533019	106.56	-0.02	88.52	0.29
3776	1,971.3	33.09799172	-103.57533690	104.38	-0.02	97.58	0.30
3777	1,971.9	33.09799478	-103.57534364	105.70	-0.02	92.97	0.29
3778	1,972.4	33.09799769	-103.57535040	105.20	-0.01	89.96	0.29
3779	1,972.9	33.09800068	-103.57535714	108.24	-0.04	97.89	0.24
3780	1,973.4	33.09800376	-103.57536385	100.39	0.01	93.52	0.31
3781	1,973.9	33.09800704	-103.57537040	107.81	-0.04	93.75	0.26
3782	1,974.5	33.09801054	-103.57537682	102.15	0.01	92.85	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3783	1,975.0	33.09801413	-103.57538331	118.63	-0.06	91.84	0.27
3784	1,975.5	33.09801776	-103.57538984	110.70	0.02	101.02	0.32
3785	1,976.0	33.09802128	-103.57539640	112.70	-0.06	97.81	0.28
3786	1,976.6	33.09802473	-103.57540299	99.88	0.01	100.23	0.31
3787	1,977.1	33.09802814	-103.57540960	98.87	-0.04	95.55	0.25
3788	1,977.6	33.09803153	-103.57541623	89.18	0.01	85.78	0.30
3789	1,978.1	33.09803514	-103.57542280	96.60	-0.05	83.36	0.27
3790	1,978.6	33.09803880	-103.57542939	90.94	0.02	80.35	0.33
3791	1,979.2	33.09804238	-103.57543608	101.25	-0.06	86.80	0.28
3792	1,979.7	33.09804596	-103.57544277	91.76	0.01	84.06	0.34
3793	1,980.2	33.09804950	-103.57544930	89.38	-0.03	85.74	0.33
3794	1,980.7	33.09805305	-103.57545584	86.48	0.01	82.54	0.34
3795	1,981.3	33.09805658	-103.57546251	79.61	0.08	81.52	0.40
3796	1,981.8	33.09806012	-103.57546908	77.58	0.01	71.76	0.41
3797	1,982.3	33.09806378	-103.57547533	86.41	-0.10	76.68	0.29
3798	1,982.8	33.09806738	-103.57548162	80.66	-0.04	71.37	0.34
3799	1,983.3	33.09807088	-103.57548806	75.16	-0.04	67.15	0.34
3800	1,983.9	33.09807445	-103.57549446	69.81	-0.04	64.18	0.32
3801	1,984.4	33.09807818	-103.57550087	71.09	-0.05	64.10	0.32
3802	1,984.9	33.09808183	-103.57550724	60.47	-0.04	56.37	0.35
3803	1,985.4	33.09808534	-103.57551354	55.04	-0.06	57.19	0.37
3804	1,986.0	33.09808878	-103.57551985	48.98	-0.04	56.09	0.39
3805	1,986.5	33.09809214	-103.57552617	53.63	-0.11	56.13	0.32
3806	1,987.0	33.09809554	-103.57553246	47.73	-0.01	52.81	0.39
3807	1,987.5	33.09809894	-103.57553873	50.39	-0.04	46.17	0.33
3808	1,988.0	33.09810204	-103.57554508	41.52	-0.01	42.19	0.30
3809	1,988.6	33.09810499	-103.57555143	44.73	-0.07	44.84	0.23
3810	1,989.1	33.09810792	-103.57555811	-2.38	0.56	39.26	0.55
3811	1,989.6	33.09811085	-103.57556488	34.73	0.03	41.21	0.29
3812	1,990.1	33.09811417	-103.57557162	38.09	0.03	41.80	0.32
3813	1,990.7	33.09811754	-103.57557833	46.99	-0.04	40.98	0.31
3814	1,991.2	33.09812016	-103.57558534	46.06	-0.01	42.85	0.30
3815	1,991.7	33.09812274	-103.57559237	46.17	-0.04	45.23	0.24
3816	1,992.2	33.09812503	-103.57559905	40.47	-0.02	40.20	0.27
3817	1,992.7	33.09812732	-103.57560571	39.57	-0.04	42.81	0.27
3818	1,993.3	33.09812960	-103.57561217	36.68	0.00	43.13	0.30
3819	1,993.8	33.09813190	-103.57561859	45.43	-0.07	47.73	0.26
3820	1,994.3	33.09813424	-103.57562484	46.64	-0.02	56.80	0.30
3821	1,994.8	33.09813689	-103.57563117	74.69	-0.09	88.05	0.24
3822	1,995.4	33.09814010	-103.57563724	135.35	0.06	137.50	0.26
3823	1,995.9	33.09814317	-103.57564295	56.37	-0.19	-105.51	-0.50
3824	1,996.4	33.09814593	-103.57564792	86.88	-0.03	5.43	-0.05
3825	1,996.9	33.09814819	-103.57565226	63.71	-0.04	90.08	0.25
3826	1,997.4	33.09814986	-103.57565590	51.33	0.01	82.50	0.30
3827	1,998.0	33.09815083	-103.57565793	49.14	-0.03	74.69	0.29
3828	1,998.5	33.09815119	-103.57565860	46.41	-0.03	71.80	0.29
3829	1,999.0	33.09815122	-103.57565884	47.23	-0.02	73.36	0.29
3830	1,999.5	33.09815105	-103.57565882	46.29	-0.02	72.07	0.30
3831	2,000.1	33.09815210	-103.57565906	47.31	-0.02	73.67	0.33
3832	2,000.6	33.09815364	-103.57565940	48.59	0.03	70.63	0.31
3833	2,001.1	33.09815622	-103.57565890	49.57	-0.04	64.81	0.27
3834	2,001.6	33.09815908	-103.57565818	48.01	-0.06	61.33	0.23
3835	2,002.1	33.09816258	-103.57565747	46.80	-0.03	58.56	0.29
3836	2,002.7	33.09816616	-103.57565677	50.70	-0.09	55.08	0.28
3837	2,003.2	33.09816790	-103.57565538	46.76	-0.05	47.70	0.28
3838	2,003.7	33.09816968	-103.57565392	41.37	-0.01	41.95	0.32
3839	2,004.2	33.09817340	-103.57565185	39.14	-0.03	39.61	0.30
3840	2,004.8	33.09817682	-103.57564925	32.31	0.03	36.64	0.24
3841	2,005.3	33.09817841	-103.57564351	34.14	0.01	39.49	0.23
3842	2,005.8	33.09817945	-103.57563761	34.10	0.00	42.58	0.26
3843	2,006.3	33.09817863	-103.57563111	40.00	-0.02	49.30	0.28
3844	2,006.8	33.09817736	-103.57562457	51.80	0.02	65.00	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3845	2,007.4	33.09817513	-103.57561797	97.46	0.01	112.46	0.30
3846	2,007.9	33.09817265	-103.57561123	32.38	-0.13	-31.29	-0.08
3847	2,008.4	33.09816984	-103.57560433	105.31	-0.02	-16.33	-0.02
3848	2,008.9	33.09816697	-103.57559747	106.80	-0.08	108.83	0.14
3849	2,009.5	33.09816406	-103.57559065	103.09	-0.01	106.99	0.25
3850	2,010.0	33.09816110	-103.57558364	119.18	-0.07	91.99	0.22
3851	2,010.5	33.09815809	-103.57557648	119.69	0.00	97.42	0.29
3852	2,011.0	33.09815533	-103.57556952	114.65	-0.03	101.25	0.29
3853	2,011.5	33.09815269	-103.57556267	106.02	0.00	97.66	0.29
3854	2,012.1	33.09815017	-103.57555551	111.64	-0.04	98.71	0.27
3855	2,012.6	33.09814769	-103.57554822	102.11	0.02	95.12	0.27
3856	2,013.1	33.09814441	-103.57554201	92.50	0.01	89.92	0.26
3857	2,013.6	33.09814096	-103.57553604	102.81	0.01	92.89	0.30
3858	2,014.2	33.09813775	-103.57552917	107.70	-0.11	93.87	0.19
3859	2,014.7	33.09813456	-103.57552220	97.31	0.00	91.84	0.30
3860	2,015.2	33.09813135	-103.57551505	108.56	-0.07	90.31	0.27
3861	2,015.7	33.09812815	-103.57550793	117.07	-0.01	93.87	0.37
3862	2,016.2	33.09812486	-103.57550080	135.12	-0.14	108.44	0.28
3863	2,016.8	33.09812143	-103.57549357	119.81	-0.04	100.39	0.38
3864	2,017.3	33.09811780	-103.57548685	124.34	-0.10	99.41	0.33
3865	2,017.8	33.09811413	-103.57548001	110.94	-0.01	102.89	0.38
3866	2,018.3	33.09811056	-103.57547323	117.50	-0.06	100.78	0.33
3867	2,018.9	33.09810695	-103.57546652	117.27	-0.02	96.84	0.34
3868	2,019.4	33.09810322	-103.57545988	129.41	-0.07	100.00	0.29
3869	2,019.9	33.09809960	-103.57545332	128.44	-0.04	101.09	0.36
3870	2,020.4	33.09809612	-103.57544680	121.52	-0.06	94.41	0.37
3871	2,020.9	33.09809263	-103.57544024	110.47	-0.04	95.35	0.36
3872	2,021.5	33.09808913	-103.57543361	109.18	-0.04	105.63	0.30
3873	2,022.0	33.09808580	-103.57542685	105.51	-0.01	95.82	0.30
3874	2,022.5	33.09808259	-103.57541999	109.34	-0.03	99.18	0.26
3875	2,023.0	33.09807931	-103.57541307	99.30	-0.01	93.71	0.30
3876	2,023.6	33.09807599	-103.57540611	102.62	-0.03	95.39	0.27
3877	2,024.1	33.09807255	-103.57539922	95.51	0.00	95.94	0.32
3878	2,024.6	33.09806909	-103.57539236	98.44	-0.01	90.47	0.31
3879	2,025.1	33.09806532	-103.57538541	97.38	0.00	88.83	0.34
3880	2,025.6	33.09806150	-103.57537845	103.79	-0.02	97.38	0.33
3881	2,026.2	33.09805773	-103.57537144	106.21	0.00	89.06	0.39
3882	2,026.7	33.09805394	-103.57536443	109.49	-0.02	91.52	0.36
3883	2,027.2	33.09805000	-103.57535776	104.14	-0.01	96.25	0.35
3884	2,027.7	33.09804609	-103.57535104	110.23	-0.02	98.59	0.31
3885	2,028.3	33.09804259	-103.57534389	109.02	-0.02	97.38	0.31
3886	2,028.8	33.09803907	-103.57533690	102.46	-0.01	92.73	0.32
3887	2,029.3	33.09803554	-103.57533063	95.86	-0.03	94.96	0.31
3888	2,029.8	33.09803197	-103.57532430	94.38	0.01	103.13	0.31
3889	2,030.3	33.09802833	-103.57531781	95.27	-0.04	102.38	0.29
3890	2,030.9	33.09802461	-103.57531137	100.20	-0.01	97.03	0.31
3891	2,031.4	33.09802078	-103.57530505	104.65	-0.06	95.27	0.27
3892	2,031.9	33.09801700	-103.57529862	108.98	-0.04	93.48	0.28
3893	2,032.4	33.09801329	-103.57529206	102.23	-0.08	87.58	0.27
3894	2,033.0	33.09800967	-103.57528544	94.38	-0.02	83.83	0.31
3895	2,033.5	33.09800615	-103.57527882	94.38	-0.06	83.20	0.29
3896	2,034.0	33.09800260	-103.57527240	88.44	-0.02	81.76	0.31
3897	2,034.5	33.09799901	-103.57526611	87.93	-0.07	79.06	0.26
3898	2,035.0	33.09799536	-103.57525944	81.29	-0.02	82.66	0.32
3899	2,035.6	33.09799169	-103.57525262	85.43	-0.07	78.09	0.26
3900	2,036.1	33.09798802	-103.57524585	87.03	-0.02	84.06	0.30
3901	2,036.6	33.09798434	-103.57523908	86.72	-0.06	79.41	0.27
3902	2,037.1	33.09798080	-103.57523241	80.59	-0.02	77.54	0.31
3903	2,037.7	33.09797727	-103.57522575	81.80	-0.06	78.01	0.29
3904	2,038.2	33.09797382	-103.57521933	79.22	-0.02	78.09	0.34
3905	2,038.7	33.09797036	-103.57521290	85.23	-0.07	75.23	0.26
3906	2,039.2	33.09796681	-103.57520640	89.22	-0.02	80.16	0.33

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3907	2,039.7	33.09796322	-103.57519988	94.92	-0.07	78.28	0.32
3908	2,040.3	33.09795948	-103.57519346	97.97	-0.02	75.70	0.34
3909	2,040.8	33.09795570	-103.57518706	100.59	-0.06	79.96	0.33
3910	2,041.3	33.09795181	-103.57518072	97.23	-0.03	81.41	0.36
3911	2,041.8	33.09794784	-103.57517431	97.73	-0.06	83.36	0.35
3912	2,042.4	33.09794373	-103.57516780	96.91	-0.02	80.31	0.34
3913	2,042.9	33.09793966	-103.57516150	100.27	-0.03	83.20	0.31
3914	2,043.4	33.09793566	-103.57515555	103.67	0.00	84.34	0.31
3915	2,043.9	33.09793164	-103.57514938	110.90	-0.07	88.36	0.28
3916	2,044.4	33.09792760	-103.57514300	111.21	-0.02	83.63	0.31
3917	2,045.0	33.09792367	-103.57513662	107.85	-0.05	80.74	0.28
3918	2,045.5	33.09791985	-103.57513027	103.44	-0.02	82.81	0.31
3919	2,046.0	33.09791606	-103.57512371	105.23	-0.08	90.31	0.26
3920	2,046.5	33.09791230	-103.57511705	97.23	-0.03	87.73	0.30
3921	2,047.1	33.09790869	-103.57511038	101.17	-0.05	87.70	0.32
3922	2,047.6	33.09790515	-103.57510374	99.88	0.01	84.10	0.38
3923	2,048.1	33.09790149	-103.57509739	105.98	-0.11	82.58	0.24
3924	2,048.6	33.09789781	-103.57509113	88.75	-0.02	72.03	0.33
3925	2,049.1	33.09789398	-103.57508543	74.14	-0.09	59.77	0.23
3926	2,049.7	33.09789013	-103.57507979	60.23	-0.04	63.32	0.32
3927	2,050.2	33.09788613	-103.57507410	55.43	-0.11	65.00	0.31
3928	2,050.7	33.09788214	-103.57506843	49.69	-0.07	57.23	0.37
3929	2,051.2	33.09787829	-103.57506282	50.74	-0.15	47.46	0.33
3930	2,051.8	33.09787440	-103.57505723	41.88	-0.09	39.53	0.35
3931	2,052.3	33.09787022	-103.57505170	37.34	-0.14	34.69	0.27
3932	2,052.8	33.09786614	-103.57504621	28.75	-0.04	28.63	0.33
3933	2,053.3	33.09786268	-103.57504129	27.54	-0.12	24.81	0.28
3934	2,053.8	33.09785961	-103.57503635	20.08	-0.03	21.48	0.33
3935	2,054.4	33.09785750	-103.57503151	20.04	-0.09	18.67	0.28
3936	2,054.9	33.09785716	-103.57502708	16.48	-0.05	16.13	0.30
3937	2,055.4	33.09785950	-103.57502324	15.82	-0.07	16.17	0.24
3938	2,055.9	33.09786279	-103.57502113	16.56	-0.06	16.84	0.30
3939	2,056.5	33.09786715	-103.57502086	20.43	-0.10	17.62	0.28
3940	2,057.0	33.09787153	-103.57502308	23.40	-0.04	20.04	0.33
3941	2,057.5	33.09787592	-103.57502719	26.02	-0.06	24.10	0.30
3942	2,058.0	33.09788036	-103.57503173	31.80	-0.05	31.02	0.27
3943	2,058.5	33.09788483	-103.57503651	39.10	-0.06	37.31	0.31
3944	2,059.1	33.09788932	-103.57504184	57.34	-0.10	51.06	0.30
3945	2,059.6	33.09789384	-103.57504738	69.96	-0.04	51.48	0.38
3946	2,060.1	33.09789793	-103.57505345	86.09	-0.08	55.51	0.30
3947	2,060.6	33.09790191	-103.57505962	86.33	-0.04	65.23	0.32
3948	2,061.2	33.09790610	-103.57506527	89.30	-0.03	69.34	0.31
3949	2,061.7	33.09791031	-103.57507087	94.81	-0.03	77.07	0.33
3950	2,062.2	33.09791460	-103.57507672	101.02	-0.06	83.09	0.26
3951	2,062.7	33.09791884	-103.57508258	96.06	-0.03	78.24	0.29
3952	2,063.2	33.09792286	-103.57508865	99.84	-0.06	74.18	0.26
3953	2,063.8	33.09792696	-103.57509490	90.20	-0.02	66.37	0.30
3954	2,064.3	33.09793080	-103.57510096	84.92	-0.06	66.68	0.28
3955	2,064.8	33.09793477	-103.57510726	76.29	-0.01	62.03	0.32
3956	2,065.3	33.09793882	-103.57511386	79.06	-0.06	63.01	0.28
3957	2,065.9	33.09794285	-103.57512035	70.70	-0.01	61.99	0.32
3958	2,066.4	33.09794685	-103.57512662	71.02	-0.06	61.76	0.26
3959	2,066.9	33.09795086	-103.57513294	66.45	-0.02	61.17	0.30
3960	2,067.4	33.09795489	-103.57513927	72.77	-0.07	63.36	0.24
3961	2,067.9	33.09795896	-103.57514555	69.92	-0.02	61.56	0.29
3962	2,068.5	33.09796309	-103.57515177	75.55	-0.06	61.41	0.25
3963	2,069.0	33.09796718	-103.57515812	76.17	-0.03	64.45	0.30
3964	2,069.5	33.09797125	-103.57516457	78.59	-0.05	66.91	0.28
3965	2,070.0	33.09797537	-103.57517104	77.34	-0.03	68.67	0.29
3966	2,070.6	33.09797951	-103.57517754	79.96	-0.05	67.54	0.25
3967	2,071.1	33.09798365	-103.57518408	75.23	-0.02	62.42	0.30
3968	2,071.6	33.09798778	-103.57519061	74.41	-0.04	65.43	0.31

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
3969	2,072.1	33.09799212	-103.57519713	72.11	-0.03	66.80	0.33
3970	2,072.6	33.09799649	-103.57520365	77.54	-0.04	65.47	0.25
3971	2,073.2	33.09800088	-103.57521007	75.74	-0.04	68.83	0.29
3972	2,073.7	33.09800527	-103.57521652	81.52	-0.05	69.18	0.27
3973	2,074.2	33.09800940	-103.57522320	77.77	-0.04	68.05	0.28
3974	2,074.7	33.09801353	-103.57522981	75.04	-0.03	69.73	0.29
3975	2,075.3	33.09801773	-103.57523586	83.09	-0.10	73.40	0.25
3976	2,075.8	33.09802195	-103.57524202	84.34	-0.03	75.35	0.31
3977	2,076.3	33.09802614	-103.57524849	98.05	-0.07	72.77	0.23
3978	2,076.8	33.09803033	-103.57525500	101.60	-0.04	75.59	0.26
3979	2,077.3	33.09803448	-103.57526153	105.70	-0.06	83.01	0.25
3980	2,077.9	33.09803842	-103.57526785	100.51	-0.04	80.74	0.24
3981	2,078.4	33.09804197	-103.57527378	100.04	-0.06	74.69	0.37
3982	2,078.9	33.09804451	-103.57528011	95.04	-0.03	79.18	0.36
3983	2,079.4	33.09804574	-103.57528691	90.51	-0.05	81.25	0.30
3984	2,080.0	33.09804805	-103.57529378	91.29	-0.01	82.11	0.31
3985	2,080.5	33.09805132	-103.57530067	95.59	-0.04	89.18	0.29
3986	2,081.0	33.09805571	-103.57530665	87.81	-0.01	76.68	0.33
3987	2,081.5	33.09806082	-103.57531203	92.31	-0.09	77.07	0.24
3988	2,082.0	33.09806549	-103.57531750	87.34	-0.01	70.82	0.28
3989	2,082.6	33.09806995	-103.57532301	76.91	-0.09	49.38	0.18
3990	2,083.1	33.09807412	-103.57532940	63.09	-0.01	54.38	0.24
3991	2,083.6	33.09807819	-103.57533603	64.34	-0.10	71.29	0.13
3992	2,084.1	33.09808206	-103.57534266	58.48	-0.03	68.83	0.23
3993	2,084.7	33.09808591	-103.57534931	59.30	-0.07	54.38	0.24
3994	2,085.2	33.09808962	-103.57535582	53.56	0.01	46.02	0.30
3995	2,085.7	33.09809333	-103.57536231	60.12	-0.12	49.10	0.15
3996	2,086.2	33.09809739	-103.57536872	50.82	-0.01	44.14	0.27
3997	2,086.7	33.09810145	-103.57537516	65.63	-0.20	44.61	0.11
3998	2,087.3	33.09810541	-103.57538187	49.41	-0.03	42.73	0.29
3999	2,087.8	33.09810937	-103.57538853	51.02	-0.09	42.58	0.25
4000	2,088.3	33.09811333	-103.57539502	44.81	0.01	40.20	0.31
4001	2,088.8	33.09811743	-103.57540163	55.66	-0.13	41.80	0.18
4002	2,089.4	33.09812160	-103.57540813	46.13	0.00	42.77	0.28
4003	2,089.9	33.09812583	-103.57541463	55.59	-0.11	42.89	0.19
4004	2,090.4	33.09813007	-103.57542100	47.07	0.00	42.62	0.30
4005	2,090.9	33.09813435	-103.57542729	57.85	-0.14	47.27	0.17
4006	2,091.4	33.09813872	-103.57543355	49.18	-0.01	44.88	0.28
4007	2,092.0	33.09814303	-103.57543973	57.15	-0.09	50.74	0.20
4008	2,092.5	33.09814730	-103.57544583	53.59	0.02	53.16	0.32
4009	2,093.0	33.09815182	-103.57545192	62.62	-0.05	54.57	0.28
4010	2,093.5	33.09815652	-103.57545801	63.20	0.04	56.29	0.42
4011	2,094.1	33.09816109	-103.57546383	70.55	-0.02	67.85	0.45
4012	2,094.6	33.09816562	-103.57546956	65.82	0.06	78.71	0.66
4013	2,095.1	33.09817035	-103.57547530	85.86	-0.01	85.66	0.71
4014	2,095.6	33.09817513	-103.57548107	88.28	0.05	95.27	0.68
4015	2,096.1	33.09817976	-103.57548648	118.75	0.01	103.44	0.60
4016	2,096.7	33.09818437	-103.57549186	125.98	0.09	117.19	0.64
4017	2,097.2	33.09818881	-103.57549777	142.46	-0.02	128.13	0.56
4018	2,097.7	33.09819324	-103.57550369	142.97	0.04	140.82	0.57
4019	2,098.2	33.09819763	-103.57550942	149.77	-0.05	145.20	0.50
4020	2,098.8	33.09820204	-103.57551517	154.18	0.01	153.40	0.55
4021	2,099.3	33.09820647	-103.57552096	163.24	-0.06	157.77	0.51
4022	2,099.8	33.09821086	-103.57552684	152.46	0.04	146.68	0.55
4023	2,100.3	33.09821512	-103.57553298	157.54	-0.08	149.49	0.46
4024	2,100.8	33.09821937	-103.57553919	137.03	-0.01	146.06	0.53
4025	2,101.4	33.09822357	-103.57554560	128.59	0.14	122.50	0.88
4026	2,101.9	33.09822771	-103.57555207	111.41	0.14	114.77	1.01
4027	2,102.4	33.09823175	-103.57555865	104.06	0.03	127.50	0.62
4028	2,102.9	33.09823561	-103.57556529	92.93	-0.04	121.25	0.55
4029	2,103.5	33.09823926	-103.57557197	89.10	0.00	112.42	0.53
4030	2,104.0	33.09824295	-103.57557848	88.75	-0.03	117.62	0.54

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4031	2,104.5	33.09824666	-103.57558485	93.36	-0.04	125.82	0.45
4032	2,105.0	33.09825055	-103.57559143	95.59	-0.03	126.76	0.42
4033	2,105.5	33.09825452	-103.57559808	108.40	-0.03	132.89	0.41
4034	2,106.1	33.09825828	-103.57560461	113.91	-0.07	121.88	0.44
4035	2,106.6	33.09826197	-103.57561110	125.86	-0.05	140.23	0.41
4036	2,107.1	33.09826553	-103.57561765	120.04	-0.07	130.66	0.37
4037	2,107.6	33.09826905	-103.57562418	123.87	-0.06	121.41	0.41
4038	2,108.2	33.09827251	-103.57563050	116.48	-0.05	128.36	0.40
4039	2,108.7	33.09827596	-103.57563680	113.09	0.00	110.90	0.39
4040	2,109.2	33.09827903	-103.57564370	99.02	-0.04	84.69	0.39
4041	2,109.7	33.09828208	-103.57565058	77.50	0.01	86.48	0.38
4042	2,110.2	33.09828507	-103.57565701	59.06	-0.06	83.32	0.34
4043	2,110.8	33.09828803	-103.57566335	49.65	-0.06	69.57	0.34
4044	2,111.3	33.09829078	-103.57566905	44.61	-0.09	62.77	0.37
4045	2,111.8	33.09829353	-103.57567489	45.98	-0.12	58.59	0.37
4046	2,112.3	33.09829622	-103.57568103	-14.22	-0.48	30.74	-0.35
4047	2,112.9	33.09829888	-103.57568709	17.77	-0.17	26.56	0.73
4048	2,113.4	33.09830151	-103.57569300	38.75	-0.08	42.62	0.27
4049	2,113.9	33.09830452	-103.57569859	46.06	-0.10	55.94	0.37
4050	2,114.4	33.09830804	-103.57570368	44.61	-0.03	58.59	0.40
4051	2,114.9	33.09831243	-103.57570705	47.07	-0.08	59.69	0.34
4052	2,115.5	33.09831767	-103.57570875	45.94	-0.02	58.87	0.37
4053	2,116.0	33.09832225	-103.57570746	45.20	-0.03	53.59	0.33
4054	2,116.5	33.09832637	-103.57570409	40.20	-0.02	47.97	0.29
4055	2,117.0	33.09832743	-103.57569873	40.66	-0.06	45.20	0.26
4056	2,117.6	33.09832701	-103.57569243	38.79	-0.02	44.14	0.24
4057	2,118.1	33.09832458	-103.57568645	41.06	-0.06	46.41	0.27
4058	2,118.6	33.09832152	-103.57568058	41.72	-0.07	52.89	0.30
4059	2,119.1	33.09831855	-103.57567413	41.88	-0.06	56.09	0.30
4060	2,119.6	33.09831558	-103.57566757	44.06	-0.07	53.40	0.29
4061	2,120.2	33.09831248	-103.57566167	39.02	-0.04	49.14	0.38
4062	2,120.7	33.09830936	-103.57565582	46.17	-0.13	54.81	0.25
4063	2,121.2	33.09830602	-103.57564943	43.79	-0.03	61.25	0.33
4064	2,121.7	33.09830264	-103.57564307	57.42	-0.08	71.33	0.37
4065	2,122.3	33.09829884	-103.57563696	81.21	-0.04	84.92	0.40
4066	2,122.8	33.09829509	-103.57563078	110.94	-0.11	91.88	0.34
4067	2,123.3	33.09829152	-103.57562425	123.67	-0.04	114.81	0.42
4068	2,123.8	33.09828798	-103.57561771	126.13	-0.07	131.17	0.37
4069	2,124.3	33.09828451	-103.57561118	142.85	-0.01	137.42	0.42
4070	2,124.9	33.09828097	-103.57560492	141.17	0.00	139.61	0.44
4071	2,125.4	33.09827726	-103.57559913	131.37	0.04	126.25	0.48
4072	2,125.9	33.09827350	-103.57559315	123.56	-0.09	133.09	0.34
4073	2,126.4	33.09826967	-103.57558689	95.08	0.02	116.17	0.43
4074	2,127.0	33.09826541	-103.57558131	85.82	-0.03	110.08	0.40
4075	2,127.5	33.09826074	-103.57557632	74.69	0.03	110.27	0.46
4076	2,128.0	33.09825585	-103.57557223	83.28	-0.10	112.46	0.39
4077	2,128.5	33.09825080	-103.57556871	80.55	-0.01	109.06	0.51
4078	2,129.0	33.09824596	-103.57556473	84.88	-0.01	109.38	0.54
4079	2,129.6	33.09824120	-103.57556056	86.25	0.05	110.59	0.57
4080	2,130.1	33.09823678	-103.57555580	100.70	-0.04	124.45	0.55
4081	2,130.6	33.09823246	-103.57555085	99.14	0.17	126.02	0.72
4082	2,131.1	33.09822822	-103.57554567	116.80	0.06	126.09	0.86
4083	2,131.7	33.09822398	-103.57554045	125.51	-0.02	138.01	0.68
4084	2,132.2	33.09821996	-103.57553484	133.91	-0.02	160.27	0.52
4085	2,132.7	33.09821600	-103.57552922	143.91	-0.04	150.47	0.48
4086	2,133.2	33.09821287	-103.57552355	153.24	-0.01	145.63	0.53
4087	2,133.7	33.09820983	-103.57551784	162.50	-0.06	148.13	0.53
4088	2,134.3	33.09820746	-103.57551179	158.32	0.01	157.11	0.55
4089	2,134.8	33.09820514	-103.57550593	151.84	-0.10	151.25	0.47
4090	2,135.3	33.09820299	-103.57550072	142.15	-0.01	147.15	0.52
4091	2,135.8	33.09820098	-103.57549577	140.63	-0.09	146.48	0.49
4092	2,136.4	33.09819943	-103.57549180	139.30	-0.04	142.38	0.61

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4093	2,136.9	33.09819821	-103.57548822	135.86	0.02	140.63	0.80
4094	2,137.4	33.09819759	-103.57548541	136.68	0.12	138.56	1.21
4095	2,137.9	33.09819808	-103.57548289	151.76	0.51	148.28	2.49
4096	2,138.4	33.09819984	-103.57548071	176.91	1.17	169.96	5.41
4097	2,139.0	33.09820246	-103.57548005	202.38	1.78	207.97	9.44
4098	2,139.5	33.09820576	-103.57548066	174.49	1.16	209.02	9.11
4099	2,140.0	33.09820902	-103.57548375	159.34	0.27	171.80	4.15
4100	2,140.5	33.09821227	-103.57548829	161.88	0.03	159.61	1.61
4101	2,141.1	33.09821489	-103.57549402	156.25	-0.11	152.73	0.70
4102	2,141.6	33.09821728	-103.57550021	141.33	0.01	162.73	0.56
4103	2,142.1	33.09821918	-103.57550701	140.70	0.00	158.28	0.56
4104	2,142.6	33.09822095	-103.57551396	145.98	-0.02	147.85	0.47
4105	2,143.1	33.09822233	-103.57552067	136.09	-0.03	136.99	0.50
4106	2,143.7	33.09822365	-103.57552730	137.93	-0.06	130.39	0.49
4107	2,144.2	33.09822431	-103.57553455	135.23	-0.01	132.66	0.54
4108	2,144.7	33.09822491	-103.57554184	134.26	0.11	131.02	0.74
4109	2,145.2	33.09822511	-103.57554920	103.13	0.50	111.68	1.12
4110	2,145.8	33.09822530	-103.57555660	114.61	-0.01	130.31	0.72
4111	2,146.3	33.09822546	-103.57556406	110.59	0.01	136.17	0.61
4112	2,146.8	33.09822555	-103.57557147	121.56	-0.10	146.80	0.48
4113	2,147.3	33.09822540	-103.57557876	129.34	-0.03	144.84	0.51
4114	2,147.8	33.09822531	-103.57558591	135.70	-0.12	122.85	0.40
4115	2,148.4	33.09822534	-103.57559268	108.16	-0.01	107.77	0.44
4116	2,148.9	33.09822547	-103.57559922	88.95	-0.09	113.44	0.35
4117	2,149.4	33.09822576	-103.57560545	64.65	-0.01	97.46	0.38
4118	2,149.9	33.09822617	-103.57561175	53.83	-0.05	79.49	0.39
4119	2,150.5	33.09822670	-103.57561815	51.45	-0.01	72.50	0.39
4120	2,151.0	33.09822756	-103.57562437	44.41	0.04	62.46	0.45
4121	2,151.5	33.09822869	-103.57563048	41.60	-0.01	55.47	0.41
4122	2,152.0	33.09822955	-103.57563653	33.36	-0.01	49.14	0.36
4123	2,152.5	33.09823026	-103.57564253	32.19	-0.05	45.90	0.27
4124	2,153.1	33.09823133	-103.57564842	30.78	-0.01	41.80	0.31
4125	2,153.6	33.09823253	-103.57565428	32.66	-0.05	40.70	0.27
4126	2,154.1	33.09823735	-103.57565638	32.38	0.00	40.20	0.32
4127	2,154.6	33.09824300	-103.57565762	32.42	0.02	42.66	0.31
4128	2,155.2	33.09824671	-103.57565304	36.06	0.00	44.14	0.31
4129	2,155.7	33.09825021	-103.57564784	37.50	0.04	49.41	0.35
4130	2,156.2	33.09825098	-103.57564126	43.24	-0.06	52.46	0.29
4131	2,156.7	33.09825163	-103.57563460	43.59	0.01	57.58	0.32
4132	2,157.2	33.09825157	-103.57562764	56.91	-0.10	69.22	0.23
4133	2,157.8	33.09825146	-103.57562062	65.20	-0.01	74.65	0.35
4134	2,158.3	33.09825115	-103.57561331	106.02	-0.13	105.12	0.29
4135	2,158.8	33.09825076	-103.57560604	108.48	-0.03	95.04	0.38
4136	2,159.3	33.09825006	-103.57559884	131.91	-0.14	97.50	0.33
4137	2,159.9	33.09824933	-103.57559164	123.48	-0.02	111.52	0.45
4138	2,160.4	33.09824852	-103.57558441	117.62	-0.10	118.20	0.41
4139	2,160.9	33.09824789	-103.57557718	101.72	0.00	132.54	0.51
4140	2,161.4	33.09824750	-103.57556994	95.39	-0.07	123.24	0.49
4141	2,161.9	33.09824704	-103.57556271	85.82	-0.03	111.56	0.51
4142	2,162.5	33.09824650	-103.57555548	82.31	-0.04	108.40	0.54
4143	2,163.0	33.09824590	-103.57554812	79.57	0.01	105.59	0.56
4144	2,163.5	33.09824526	-103.57554061	77.81	0.00	104.49	0.53
4145	2,164.0	33.09824445	-103.57553328	79.49	-0.01	113.48	0.46
4146	2,164.6	33.09824355	-103.57552603	78.71	-0.01	114.81	0.48
4147	2,165.1	33.09824253	-103.57551889	91.76	-0.02	123.75	0.46
4148	2,165.6	33.09824146	-103.57551177	101.09	0.02	125.59	0.53
4149	2,166.1	33.09824019	-103.57550501	114.92	-0.01	121.48	0.55
4150	2,166.6	33.09823887	-103.57549830	130.78	0.05	145.35	0.59
4151	2,167.2	33.09823755	-103.57549203	156.09	-0.06	157.27	0.51
4152	2,167.7	33.09823624	-103.57548578	163.28	0.08	151.64	0.61
4153	2,168.2	33.09823521	-103.57548015	163.98	-0.02	145.47	0.55
4154	2,168.7	33.09823434	-103.57547469	140.23	0.09	140.86	0.84

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4155	2,169.3	33.09823487	-103.57547084	106.64	0.17	148.01	1.03
4156	2,169.8	33.09823577	-103.57546761	129.34	0.11	166.68	1.69
4157	2,170.3	33.09823817	-103.57546720	144.34	0.10	153.52	1.83
4158	2,170.8	33.09824075	-103.57546778	150.20	-0.05	165.82	1.28
4159	2,171.3	33.09824377	-103.57547106	145.12	-0.03	161.37	0.75
4160	2,171.9	33.09824653	-103.57547525	136.68	-0.03	148.48	0.49
4161	2,172.4	33.09824880	-103.57548112	136.02	0.01	140.35	0.54
4162	2,172.9	33.09825059	-103.57548754	130.82	-0.02	145.78	0.53
4163	2,173.4	33.09825177	-103.57549467	116.48	-0.01	157.03	0.49
4164	2,174.0	33.09825291	-103.57550202	104.49	0.00	141.91	0.51
4165	2,174.5	33.09825402	-103.57550952	95.47	-0.02	112.77	0.47
4166	2,175.0	33.09825500	-103.57551690	83.05	0.03	116.02	0.54
4167	2,175.5	33.09825589	-103.57552412	80.59	-0.01	106.64	0.52
4168	2,176.0	33.09825663	-103.57553142	70.08	0.04	100.47	0.56
4169	2,176.6	33.09825730	-103.57553874	69.73	-0.04	96.88	0.47
4170	2,177.1	33.09825815	-103.57554597	61.21	0.03	96.84	0.50
4171	2,177.6	33.09825904	-103.57555315	65.90	-0.04	96.76	0.45
4172	2,178.1	33.09825986	-103.57555997	62.70	0.03	96.25	0.51
4173	2,178.6	33.09826065	-103.57556671	72.46	-0.10	98.67	0.39
4174	2,179.2	33.09826138	-103.57557409	68.40	0.01	100.63	0.51
4175	2,179.7	33.09826210	-103.57558147	84.84	-0.08	105.86	0.39
4176	2,180.2	33.09826302	-103.57558838	91.52	0.00	111.99	0.46
4177	2,180.7	33.09826392	-103.57559531	110.16	-0.06	118.20	0.41
4178	2,181.3	33.09826467	-103.57560242	132.66	-0.02	140.43	0.40
4179	2,181.8	33.09826544	-103.57560948	142.23	-0.07	159.18	0.40
4180	2,182.3	33.09826635	-103.57561634	125.39	-0.02	134.49	0.40
4181	2,182.8	33.09826730	-103.57562319	116.60	-0.06	124.65	0.40
4182	2,183.4	33.09826838	-103.57563011	108.87	-0.02	118.28	0.43
4183	2,183.9	33.09826935	-103.57563703	100.51	-0.04	105.43	0.43
4184	2,184.4	33.09827012	-103.57564394	96.41	-0.03	83.63	0.39
4185	2,184.9	33.09827111	-103.57565085	83.48	-0.03	86.02	0.38
4186	2,185.4	33.09827236	-103.57565773	73.52	-0.04	78.32	0.38
4187	2,186.0	33.09827340	-103.57566442	65.04	-0.02	71.02	0.40
4188	2,186.5	33.09827424	-103.57567090	61.29	-0.12	69.65	0.30
4189	2,187.0	33.09827543	-103.57567709	50.43	-0.03	67.46	0.41
4190	2,187.5	33.09827683	-103.57568313	55.16	-0.15	66.33	0.29
4191	2,188.1	33.09827832	-103.57568899	52.34	-0.05	65.70	0.39
4192	2,188.6	33.09827985	-103.57569480	54.38	-0.08	64.18	0.37
4193	2,189.1	33.09828203	-103.57570018	59.34	-0.08	61.99	0.37
4194	2,189.6	33.09828437	-103.57570545	62.42	-0.07	62.07	0.41
4195	2,190.1	33.09828690	-103.57570975	76.33	-0.19	71.02	0.29
4196	2,190.7	33.09828946	-103.57571393	71.37	-0.06	71.91	0.37
4197	2,191.2	33.09829283	-103.57571635	67.27	-0.03	67.42	0.39
4198	2,191.7	33.09829607	-103.57571855	72.73	0.00	64.18	0.40
4199	2,192.2	33.09829655	-103.57571808	68.71	-0.01	59.81	0.42
4200	2,192.8	33.09829692	-103.57571779	68.24	-0.01	56.21	0.42
4201	2,193.3	33.09829658	-103.57571860	70.47	-0.02	57.42	0.40
4202	2,193.8	33.09829651	-103.57572007	67.85	-0.07	57.38	0.36
4203	2,194.3	33.09829739	-103.57572384	74.73	-0.10	64.14	0.34
4204	2,194.8	33.09829796	-103.57572829	74.02	-0.03	68.01	0.42
4205	2,195.4	33.09829782	-103.57573435	78.24	-0.09	61.02	0.38
4206	2,195.9	33.09829775	-103.57574046	84.57	-0.07	61.91	0.40
4207	2,196.4	33.09829779	-103.57574666	70.08	-0.05	57.97	0.46
4208	2,196.9	33.09829846	-103.57575292	57.54	-0.05	54.26	0.30
4209	2,197.5	33.09829984	-103.57575926	40.08	0.11	44.30	0.38
4210	2,198.0	33.09830275	-103.57576311	36.60	0.07	42.31	0.38
4211	2,198.5	33.09830687	-103.57576503	37.38	0.03	41.29	0.39
4212	2,199.0	33.09831045	-103.57576287	41.80	-0.02	43.16	0.33
4213	2,199.5	33.09831374	-103.57575848	46.95	0.00	46.68	0.29
4214	2,200.1	33.09831500	-103.57575222	52.27	0.03	50.78	0.30
4215	2,200.6	33.09831550	-103.57574525	66.02	-0.03	51.76	0.27
4216	2,201.1	33.09831495	-103.57573817	74.96	0.00	61.68	0.31

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4217	2,201.6	33.09831418	-103.57573105	77.97	-0.09	61.29	0.27
4218	2,202.2	33.09831337	-103.57572364	66.68	-0.01	57.03	0.36
4219	2,202.7	33.09831256	-103.57571618	66.91	-0.14	66.60	0.22
4220	2,203.2	33.09831170	-103.57570826	52.66	-0.02	65.94	0.36
4221	2,203.7	33.09831084	-103.57570030	53.83	-0.15	62.70	0.24
4222	2,204.2	33.09831017	-103.57569236	45.35	-0.07	60.08	0.37
4223	2,204.8	33.09830949	-103.57568446	52.03	-0.17	57.97	0.30
4224	2,205.3	33.09830878	-103.57567681	43.71	-0.07	54.84	0.36
4225	2,205.8	33.09830797	-103.57566925	46.13	-0.15	52.81	0.21
4226	2,206.3	33.09830685	-103.57566205	39.26	-0.08	50.78	0.31
4227	2,206.9	33.09830580	-103.57565490	46.84	-0.15	56.56	0.24
4228	2,207.4	33.09830489	-103.57564784	47.34	-0.05	64.45	0.36
4229	2,207.9	33.09830397	-103.57564082	64.26	-0.13	76.13	0.32
4230	2,208.4	33.09830302	-103.57563386	84.22	-0.06	90.12	0.37
4231	2,208.9	33.09830207	-103.57562659	115.43	-0.09	88.01	0.40
4232	2,209.5	33.09830111	-103.57561904	127.42	-0.06	108.20	0.41
4233	2,210.0	33.09830022	-103.57561131	122.34	-0.01	141.52	0.44
4234	2,210.5	33.09829937	-103.57560347	113.91	-0.05	138.56	0.42
4235	2,211.0	33.09829844	-103.57559570	97.70	0.01	134.38	0.48
4236	2,211.6	33.09829747	-103.57558804	94.53	-0.06	127.19	0.40
4237	2,212.1	33.09829624	-103.57558041	83.75	0.03	119.81	0.48
4238	2,212.6	33.09829492	-103.57557282	87.11	-0.06	117.66	0.43
4239	2,213.1	33.09829370	-103.57556571	81.17	0.02	114.45	0.49
4240	2,213.6	33.09829249	-103.57555868	95.27	-0.10	122.73	0.40
4241	2,214.2	33.09829134	-103.57555150	97.93	0.01	126.17	0.51
4242	2,214.7	33.09829021	-103.57554433	118.59	-0.08	125.47	0.42
4243	2,215.2	33.09828918	-103.57553721	123.63	0.04	128.67	0.54
4244	2,215.7	33.09828816	-103.57553018	130.12	-0.05	138.63	0.48
4245	2,216.3	33.09828708	-103.57552362	125.51	0.04	134.61	0.56
4246	2,216.8	33.09828600	-103.57551694	141.91	-0.08	140.04	0.47
4247	2,217.3	33.09828497	-103.57551017	133.36	0.02	145.27	0.52
4248	2,217.8	33.09828391	-103.57550336	137.81	-0.03	140.43	0.52
4249	2,218.3	33.09828281	-103.57549674	147.38	0.03	151.91	0.51
4250	2,218.9	33.09828177	-103.57549062	148.91	-0.02	152.66	0.52
4251	2,219.4	33.09828083	-103.57548540	145.59	0.03	144.26	0.57
4252	2,219.9	33.09828002	-103.57548112	153.75	0.02	160.66	0.57
4253	2,220.4	33.09827938	-103.57547809	169.45	-0.03	204.10	0.56
4254	2,221.0	33.09828001	-103.57547588	161.48	0.04	208.48	0.59
4255	2,221.5	33.09828180	-103.57547442	171.99	-0.03	175.12	0.57
4256	2,222.0	33.09828426	-103.57547473	177.62	0.00	156.37	0.61
4257	2,222.5	33.09828716	-103.57547621	181.52	0.03	173.48	0.66
4258	2,223.0	33.09828959	-103.57547987	166.99	-0.03	166.88	0.61
4259	2,223.6	33.09829183	-103.57548455	158.32	0.04	159.61	0.68
4260	2,224.1	33.09829346	-103.57549054	155.90	0.02	178.40	0.64
4261	2,224.6	33.09829489	-103.57549691	156.99	0.04	159.49	0.60
4262	2,225.1	33.09829591	-103.57550373	163.79	0.08	169.26	0.65
4263	2,225.7	33.09829686	-103.57551061	171.02	-0.02	193.13	0.55
4264	2,226.2	33.09829762	-103.57551739	164.96	0.07	171.64	0.63
4265	2,226.7	33.09829838	-103.57552417	173.83	-0.06	174.53	0.51
4266	2,227.2	33.09829941	-103.57553100	168.32	0.02	167.46	0.56
4267	2,227.7	33.09830048	-103.57553783	167.70	-0.01	172.54	0.54
4268	2,228.3	33.09830199	-103.57554444	156.45	0.03	155.35	0.51
4269	2,228.8	33.09830343	-103.57555105	153.87	0.00	151.25	0.55
4270	2,229.3	33.09830461	-103.57555751	137.77	-0.09	145.51	0.46
4271	2,229.8	33.09830580	-103.57556404	117.27	0.00	146.02	0.53
4272	2,230.4	33.09830700	-103.57557073	127.89	-0.23	157.97	0.28
4273	2,230.9	33.09830862	-103.57557715	118.09	0.00	157.27	0.51
4274	2,231.4	33.09831099	-103.57558314	118.01	0.06	129.92	0.51
4275	2,231.9	33.09831370	-103.57558870	129.69	0.04	121.41	0.52
4276	2,232.4	33.09831682	-103.57559375	135.27	-0.03	134.38	0.44
4277	2,233.0	33.09831917	-103.57559882	119.34	0.01	132.70	0.47
4278	2,233.5	33.09832086	-103.57560392	99.41	0.00	122.15	0.41

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4279	2,234.0	33.09832277	-103.57560904	88.24	0.04	110.90	0.42
4280	2,234.5	33.09832482	-103.57561421	82.11	0.00	103.48	0.38
4281	2,235.1	33.09832718	-103.57561930	64.81	0.06	92.27	0.38
4282	2,235.6	33.09832969	-103.57562440	61.84	0.01	87.19	0.39
4283	2,236.1	33.09833250	-103.57562931	58.67	-0.08	77.81	0.28
4284	2,236.6	33.09833539	-103.57563417	48.13	-0.02	67.97	0.35
4285	2,237.1	33.09833825	-103.57563899	41.37	-0.04	58.52	0.35
4286	2,237.7	33.09834110	-103.57564382	35.31	0.01	51.25	0.36
4287	2,238.2	33.09834507	-103.57564551	34.26	-0.01	46.45	0.34
4288	2,238.7	33.09834899	-103.57564669	21.45	0.08	40.90	0.39
4289	2,239.2	33.09835128	-103.57564113	15.12	0.11	39.69	0.41
4290	2,239.8	33.09835319	-103.57563545	36.68	-0.02	45.23	0.36
4291	2,240.3	33.09835254	-103.57562902	43.48	0.01	54.26	0.37
4292	2,240.8	33.09835173	-103.57562258	57.81	-0.08	64.61	0.32
4293	2,241.3	33.09835036	-103.57561612	63.59	-0.01	73.79	0.32
4294	2,241.8	33.09834905	-103.57560962	75.47	-0.05	82.31	0.37
4295	2,242.4	33.09834791	-103.57560301	82.15	-0.04	95.08	0.34
4296	2,242.9	33.09834677	-103.57559626	91.60	0.00	106.64	0.35
4297	2,243.4	33.09834563	-103.57558925	83.13	0.07	102.81	0.38
4298	2,243.9	33.09834442	-103.57558231	102.31	0.03	101.13	0.43
4299	2,244.5	33.09834313	-103.57557547	132.70	-0.27	114.38	0.15
4300	2,245.0	33.09834169	-103.57556857	116.76	-0.02	134.22	0.41
4301	2,245.5	33.09834013	-103.57556165	119.18	-0.08	132.19	0.36
4302	2,246.0	33.09833880	-103.57555494	132.27	-0.01	140.27	0.43
4303	2,246.5	33.09833761	-103.57554838	143.59	-0.08	141.09	0.38
4304	2,247.1	33.09833681	-103.57554183	148.48	0.00	144.61	0.41
4305	2,247.6	33.09833616	-103.57553530	141.99	-0.02	143.16	0.43
4306	2,248.1	33.09833537	-103.57552888	152.54	-0.01	146.72	0.42
4307	2,248.6	33.09833454	-103.57552249	166.06	-0.01	158.01	-0.07
4308	2,249.2	33.09833384	-103.57551593	169.18	-0.12	156.45	-0.37
4309	2,249.7	33.09833316	-103.57550938	166.91	0.00	163.05	0.28
4310	2,250.2	33.09833235	-103.57550267	156.76	-0.07	140.04	0.39
4311	2,250.7	33.09833153	-103.57549599	138.28	0.00	136.29	0.46
4312	2,251.2	33.09833061	-103.57548964	124.38	-0.08	142.58	0.39
4313	2,251.8	33.09832971	-103.57548342	106.37	0.01	130.66	0.45
4314	2,252.3	33.09832895	-103.57547791	109.57	-0.06	132.42	0.41
4315	2,252.8	33.09832837	-103.57547258	119.30	-0.01	142.50	0.50
4316	2,253.3	33.09832836	-103.57546781	139.38	-0.03	150.08	0.57
4317	2,253.9	33.09832890	-103.57546356	164.38	-0.05	160.70	0.65
4318	2,254.4	33.09833057	-103.57546037	173.40	-0.02	147.85	1.04
4319	2,254.9	33.09833249	-103.57545840	171.29	0.03	166.29	1.22
4320	2,255.4	33.09833481	-103.57545817	136.60	0.10	172.70	1.34
4321	2,255.9	33.09833678	-103.57545921	115.94	0.07	166.48	1.14
4322	2,256.5	33.09833841	-103.57546155	107.31	0.03	145.78	0.84
4323	2,257.0	33.09833973	-103.57546582	102.70	0.04	131.56	0.67
4324	2,257.5	33.09834084	-103.57547152	101.21	-0.01	119.10	0.54
4325	2,258.0	33.09834206	-103.57547750	106.68	0.00	116.68	0.50
4326	2,258.6	33.09834333	-103.57548361	110.51	0.03	120.16	0.50
4327	2,259.1	33.09834425	-103.57548930	116.29	-0.06	120.39	0.41
4328	2,259.6	33.09834505	-103.57549486	113.59	0.01	120.98	0.49
4329	2,260.1	33.09834512	-103.57550028	108.79	-0.04	123.32	0.47
4330	2,260.6	33.09834504	-103.57550570	113.98	0.00	124.77	0.48
4331	2,261.2	33.09834485	-103.57551162	114.34	-0.02	120.39	0.47
4332	2,261.7	33.09834465	-103.57551759	120.63	0.00	123.16	0.43
4333	2,262.2	33.09834563	-103.57552276	115.00	0.03	129.18	0.47
4334	2,262.7	33.09834661	-103.57552788	104.77	-0.04	123.40	0.44
4335	2,263.3	33.09834763	-103.57553229	98.56	0.05	120.51	0.47
4336	2,263.8	33.09834874	-103.57553633	102.15	0.00	121.88	0.48
4337	2,264.3	33.09835015	-103.57553844	99.34	0.06	121.88	0.48
4338	2,264.8	33.09835147	-103.57554013	97.93	0.10	122.42	0.50
4339	2,265.3	33.09835249	-103.57554057	90.59	0.09	121.45	0.53
4340	2,265.9	33.09835309	-103.57554078	92.73	0.12	121.80	0.53

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4341	2,266.4	33.09835287	-103.57554051	99.69	0.07	122.70	0.50
4342	2,266.9	33.09835239	-103.57554019	100.16	0.05	123.67	0.49
4343	2,267.4	33.09835153	-103.57553981	103.67	0.04	125.70	0.49
4344	2,268.0	33.09835119	-103.57553973	104.26	0.03	126.33	0.49
4345	2,268.5	33.09835133	-103.57553993	102.31	0.02	126.21	0.49
4346	2,269.0	33.09835180	-103.57554003	101.21	0.04	125.59	0.49
4347	2,269.5	33.09835250	-103.57554007	101.72	0.05	124.49	0.51
4348	2,270.0	33.09835247	-103.57554004	102.97	0.04	123.16	0.48
4349	2,270.6	33.09835210	-103.57553999	103.59	0.04	123.71	0.47
4350	2,271.1	33.09835309	-103.57554069	105.78	0.05	124.57	0.49
4351	2,271.6	33.09835447	-103.57554161	98.24	0.02	118.91	0.45
4352	2,272.1	33.09835750	-103.57554372	93.20	0.01	114.84	0.41
4353	2,272.7	33.09836081	-103.57554603	11.41	-0.37	97.77	0.26
4354	2,273.2	33.09836520	-103.57554852	85.55	-0.08	90.63	0.09
4355	2,273.7	33.09836968	-103.57555106	83.32	-0.01	93.13	0.24
4356	2,274.2	33.09837490	-103.57555491	77.70	-0.04	98.09	0.35
4357	2,274.7	33.09838014	-103.57555880	73.24	0.01	100.43	0.42
4358	2,275.3	33.09838554	-103.57556296	75.82	-0.05	103.24	0.38
4359	2,275.8	33.09839103	-103.57556706	80.12	-0.01	108.67	0.40
4360	2,276.3	33.09839687	-103.57557086	96.06	-0.04	123.28	0.39
4361	2,276.8	33.09840273	-103.57557442	117.46	0.00	137.81	0.42
4362	2,277.4	33.09840865	-103.57557734	147.42	-0.03	160.20	0.44
4363	2,277.9	33.09841471	-103.57558020	188.59	-0.01	189.30	0.47
4364	2,278.4	33.09842097	-103.57558296	216.99	-0.01	211.76	0.49
4365	2,278.9	33.09842705	-103.57558580	240.63	0.00	241.72	0.56
4366	2,279.4	33.09843294	-103.57558875	246.60	-0.01	261.64	0.61
4367	2,280.0	33.09843882	-103.57559182	262.23	0.01	275.86	0.66
4368	2,280.5	33.09844468	-103.57559499	266.95	-0.02	280.98	0.68
4369	2,281.0	33.09845045	-103.57559841	280.47	0.01	295.66	0.72
4370	2,281.5	33.09845611	-103.57560196	275.27	0.01	299.41	0.72
4371	2,282.1	33.09846197	-103.57560507	284.41	0.02	297.66	0.73
4372	2,282.6	33.09846790	-103.57560798	275.47	0.01	295.12	0.76
4373	2,283.1	33.09847402	-103.57561035	271.84	0.02	300.35	0.75
4374	2,283.6	33.09848017	-103.57561257	260.31	0.00	292.03	0.73
4375	2,284.1	33.09848637	-103.57561434	257.81	0.03	286.88	0.77
4376	2,284.7	33.09849257	-103.57561604	240.63	-0.01	275.74	0.74
4377	2,285.2	33.09849878	-103.57561760	239.41	0.04	274.84	0.76
4378	2,285.7	33.09850496	-103.57561919	217.97	0.02	252.31	0.72
4379	2,286.2	33.09851053	-103.57562148	209.26	0.03	242.19	0.70
4380	2,286.8	33.09851579	-103.57562405	207.46	0.00	233.67	0.67
4381	2,287.3	33.09851913	-103.57562853	205.00	-0.01	221.80	0.65
4382	2,287.8	33.09852159	-103.57563291	180.70	-0.03	205.31	0.60
4383	2,288.3	33.09852089	-103.57563691	170.94	-0.03	202.27	0.60
4384	2,288.8	33.09851940	-103.57563976	156.80	-0.03	193.01	0.54
4385	2,289.4	33.09851615	-103.57563994	162.62	-0.03	208.59	0.59
4386	2,289.9	33.09851382	-103.57563868	172.50	0.00	218.87	0.73
4387	2,290.4	33.09851300	-103.57563516	185.66	0.00	223.52	0.77
4388	2,290.9	33.09851386	-103.57563275	178.56	-0.03	216.25	0.65
4389	2,291.5	33.09851658	-103.57563155	181.76	-0.02	215.04	0.62
4390	2,292.0	33.09851836	-103.57563278	161.21	-0.04	197.58	0.57
4391	2,292.5	33.09851941	-103.57563594	161.95	-0.03	195.70	0.57
4392	2,293.0	33.09851742	-103.57563829	160.86	-0.03	194.69	0.56
4393	2,293.5	33.09851374	-103.57564020	177.46	-0.02	214.96	0.62
4394	2,294.1	33.09850919	-103.57563781	185.27	0.01	224.81	0.73
4395	2,294.6	33.09850430	-103.57563380	203.01	0.05	235.08	0.66
4396	2,295.1	33.09849995	-103.57562830	209.45	0.03	239.41	0.66
4397	2,295.6	33.09849571	-103.57562245	224.53	0.02	252.03	0.75
4398	2,296.2	33.09849162	-103.57561671	233.13	0.00	265.08	0.75
4399	2,296.7	33.09848757	-103.57561100	249.88	0.01	279.57	0.76
4400	2,297.2	33.09848357	-103.57560487	264.41	-0.01	288.13	0.77
4401	2,297.7	33.09847955	-103.57559875	268.05	0.01	294.41	0.77
4402	2,298.2	33.09847527	-103.57559287	272.97	0.01	303.20	0.78

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4403	2,298.8	33.09847094	-103.57558701	275.74	0.01	302.62	0.75
4404	2,299.3	33.09846648	-103.57558132	273.56	0.01	291.80	0.74
4405	2,299.8	33.09846209	-103.57557563	255.08	0.00	282.58	0.68
4406	2,300.3	33.09845796	-103.57556998	229.22	0.02	264.34	0.66
4407	2,300.9	33.09845383	-103.57556426	238.09	0.00	262.77	0.63
4408	2,301.4	33.09844972	-103.57555839	236.21	0.03	255.90	0.63
4409	2,301.9	33.09844553	-103.57555255	233.01	-0.02	241.72	0.55
4410	2,302.4	33.09844120	-103.57554671	221.09	0.02	232.03	0.57
4411	2,302.9	33.09843662	-103.57554087	218.71	-0.02	228.44	0.54
4412	2,303.5	33.09843180	-103.57553502	213.79	0.01	218.71	0.53
4413	2,304.0	33.09842702	-103.57552914	205.00	-0.04	203.48	0.49
4414	2,304.5	33.09842230	-103.57552327	178.83	-0.01	184.77	0.47
4415	2,305.0	33.09841772	-103.57551747	172.50	-0.07	174.92	0.36
4416	2,305.6	33.09841323	-103.57551171	148.56	0.01	151.91	0.41
4417	2,306.1	33.09840875	-103.57550592	119.53	-0.03	124.18	0.40
4418	2,306.6	33.09840431	-103.57550016	92.85	0.02	113.36	0.43
4419	2,307.1	33.09840004	-103.57549432	82.23	-0.05	102.73	0.37
4420	2,307.6	33.09839579	-103.57548845	66.95	0.02	91.25	0.41
4421	2,308.2	33.09839135	-103.57548336	65.90	-0.04	85.39	0.36
4422	2,308.7	33.09838689	-103.57547835	64.45	0.01	84.26	0.44
4423	2,309.2	33.09838230	-103.57547296	78.28	-0.11	84.34	0.32
4424	2,309.7	33.09837769	-103.57546754	71.37	0.01	82.31	0.42
4425	2,310.3	33.09837290	-103.57546173	76.60	-0.05	85.86	0.42
4426	2,310.8	33.09836821	-103.57545587	71.45	0.04	92.77	0.54
4427	2,311.3	33.09836430	-103.57545033	77.46	0.03	108.87	0.67
4428	2,311.8	33.09836035	-103.57544493	101.17	0.19	138.63	1.30
4429	2,312.3	33.09835642	-103.57544022	277.42	2.57	252.70	4.69
4430	2,312.9	33.09835255	-103.57543548	-420.66	-8.84	-134.81	-10.40
4431	2,313.4	33.09834877	-103.57543067	75.90	-1.34	-180.39	-14.62
4432	2,313.9	33.09834505	-103.57542572	139.73	-0.05	147.03	-0.64
4433	2,314.4	33.09834142	-103.57542059	135.82	0.06	174.38	0.72
4434	2,315.0	33.09833707	-103.57541588	150.74	0.04	152.42	0.67
4435	2,315.5	33.09833204	-103.57541155	163.95	-0.05	150.66	0.58
4436	2,316.0	33.09832684	-103.57540819	158.83	0.04	151.37	0.62
4437	2,316.5	33.09832156	-103.57540550	153.40	-0.02	154.38	0.58
4438	2,317.0	33.09831701	-103.57540341	147.38	0.05	152.58	0.61
4439	2,317.6	33.09831280	-103.57540160	146.06	0.01	153.24	0.59
4440	2,318.1	33.09831125	-103.57540080	154.14	0.04	171.09	0.65
4441	2,318.6	33.09831052	-103.57540031	153.98	0.05	172.50	0.62
4442	2,319.1	33.09831058	-103.57540053	149.41	0.04	170.23	0.56
4443	2,319.6	33.09831078	-103.57540086	148.71	0.05	173.67	0.57
4444	2,320.2	33.09831079	-103.57540099	148.13	0.04	173.44	0.56
4445	2,320.7	33.09831077	-103.57540110	150.20	0.06	172.07	0.57
4446	2,321.2	33.09831055	-103.57540134	150.16	0.07	172.42	0.56
4447	2,321.7	33.09831040	-103.57540145	149.73	0.05	172.31	0.53
4448	2,322.3	33.09831073	-103.57540051	147.54	0.04	174.02	0.51
4449	2,322.8	33.09831101	-103.57539966	154.02	0.04	174.34	0.53
4450	2,323.3	33.09831105	-103.57539915	151.25	0.05	171.72	0.52
4451	2,323.8	33.09831110	-103.57539880	139.49	0.22	173.98	0.52
4452	2,324.4	33.09831115	-103.57539892	146.13	0.08	173.05	0.55
4453	2,324.9	33.09831119	-103.57539901	150.27	0.05	173.83	0.56
4454	2,325.4	33.09831117	-103.57539908	149.77	0.11	175.90	0.57
4455	2,325.9	33.09831116	-103.57539915	150.16	0.10	176.45	0.57
4456	2,326.4	33.09831114	-103.57539923	151.06	0.08	176.02	0.56
4457	2,327.0	33.09831111	-103.57539933	151.21	0.09	176.29	0.57
4458	2,327.5	33.09831106	-103.57539943	151.33	0.10	176.72	0.57
4459	2,328.0	33.09831099	-103.57539965	153.28	0.08	176.37	0.56
4460	2,328.5	33.09831090	-103.57539994	152.85	0.06	175.86	0.57
4461	2,329.1	33.09831088	-103.57540004	152.85	0.06	176.60	0.57
4462	2,329.6	33.09831089	-103.57540006	152.97	0.06	176.56	0.57
4463	2,330.1	33.09831087	-103.57539997	152.54	0.06	176.13	0.57
4464	2,330.6	33.09831086	-103.57539984	152.93	0.07	176.37	0.58

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4465	2,331.1	33.09831001	-103.57539763	155.51	0.08	175.08	0.59
4466	2,331.7	33.09830904	-103.57539511	170.23	-0.05	173.67	0.48
4467	2,332.2	33.09830602	-103.57539100	170.82	0.02	164.92	0.49
4468	2,332.7	33.09830286	-103.57538678	172.70	-0.04	154.81	0.46
4469	2,333.2	33.09829911	-103.57538221	180.90	-0.01	162.70	0.45
4470	2,333.8	33.09829534	-103.57537768	166.84	-0.01	156.37	0.45
4471	2,334.3	33.09829143	-103.57537350	172.70	-0.04	160.31	0.40
4472	2,334.8	33.09828746	-103.57536922	156.02	0.00	157.03	0.43
4473	2,335.3	33.09828339	-103.57536471	153.67	-0.08	149.10	0.35
4474	2,335.8	33.09827948	-103.57536019	144.41	0.01	144.65	0.42
4475	2,336.4	33.09827612	-103.57535584	139.96	-0.07	137.77	0.37
4476	2,336.9	33.09827346	-103.57535169	128.59	0.02	122.97	0.42
4477	2,337.4	33.09827196	-103.57534792	124.57	-0.07	109.14	0.40
4478	2,337.9	33.09827211	-103.57534485	123.05	-0.05	112.15	0.39
4479	2,338.5	33.09827415	-103.57534261	113.28	-0.04	107.54	0.39
4480	2,339.0	33.09827768	-103.57534210	128.13	-0.09	107.77	0.32
4481	2,339.5	33.09828242	-103.57534299	135.82	-0.02	130.59	0.38
4482	2,340.0	33.09828706	-103.57534603	142.03	-0.07	137.15	0.34
4483	2,340.5	33.09829165	-103.57535029	159.30	-0.02	144.65	0.39
4484	2,341.1	33.09829574	-103.57535501	161.84	-0.02	151.17	0.43
4485	2,341.6	33.09829967	-103.57535993	185.47	-0.01	159.61	0.44
4486	2,342.1	33.09830384	-103.57536520	177.11	-0.09	148.91	0.35
4487	2,342.6	33.09830806	-103.57537055	183.87	-0.02	153.52	0.41
4488	2,343.2	33.09831228	-103.57537609	161.17	-0.09	151.06	0.39
4489	2,343.7	33.09831650	-103.57538166	148.48	-0.02	148.44	0.48
4490	2,344.2	33.09832047	-103.57538753	142.66	-0.10	162.15	0.39
4491	2,344.7	33.09832442	-103.57539338	139.81	0.01	140.55	0.47
4492	2,345.2	33.09832845	-103.57539940	153.01	-0.08	156.91	0.44
4493	2,345.8	33.09833246	-103.57540542	151.68	-0.03	172.19	0.56
4494	2,346.3	33.09833642	-103.57541144	152.70	-0.04	165.35	0.52
4495	2,346.8	33.09834054	-103.57541696	147.73	0.05	150.00	0.61
4496	2,347.3	33.09834521	-103.57542091	136.52	-0.02	147.62	0.58
4497	2,347.9	33.09835004	-103.57542338	123.36	0.08	147.38	0.73
4498	2,348.4	33.09835520	-103.57542268	113.24	0.01	144.96	0.76
4499	2,348.9	33.09835914	-103.57541994	101.13	0.05	137.77	0.73
4500	2,349.4	33.09836128	-103.57541419	101.95	0.01	132.23	0.64
4501	2,349.9	33.09836173	-103.57540773	108.05	0.01	131.33	0.61
4502	2,350.5	33.09836040	-103.57540056	118.87	-0.06	125.78	0.50
4503	2,351.0	33.09835825	-103.57539369	98.87	0.37	134.06	1.09
4504	2,351.5	33.09835548	-103.57538706	126.76	0.05	155.39	0.98
4505	2,352.0	33.09835227	-103.57538051	134.81	-0.01	145.63	0.58
4506	2,352.6	33.09834884	-103.57537400	130.98	-0.06	139.02	0.49
4507	2,353.1	33.09834537	-103.57536738	121.60	-0.04	139.57	0.49
4508	2,353.6	33.09834191	-103.57536076	111.68	-0.06	142.15	0.48
4509	2,354.1	33.09833864	-103.57535432	119.73	-0.04	155.04	0.45
4510	2,354.6	33.09833542	-103.57534794	131.48	-0.05	156.21	0.48
4511	2,355.2	33.09833240	-103.57534157	145.82	-0.04	130.47	0.47
4512	2,355.7	33.09832941	-103.57533523	154.84	-0.07	148.91	0.45
4513	2,356.2	33.09832605	-103.57532866	165.08	-0.06	193.24	0.44
4514	2,356.7	33.09832273	-103.57532211	171.13	-0.07	172.77	0.45
4515	2,357.3	33.09831985	-103.57531584	182.46	-0.05	162.27	0.40
4516	2,357.8	33.09831692	-103.57530938	176.29	-0.05	164.14	0.38
4517	2,358.3	33.09831414	-103.57530290	180.82	-0.09	153.91	0.30
4518	2,358.8	33.09831136	-103.57529629	172.97	-0.06	147.54	0.38
4519	2,359.3	33.09830871	-103.57528961	153.63	-0.04	136.33	0.35
4520	2,359.9	33.09830595	-103.57528309	137.58	-0.03	119.38	0.34
4521	2,360.4	33.09830298	-103.57527687	128.71	-0.09	116.29	0.31
4522	2,360.9	33.09830032	-103.57527095	95.20	-0.02	78.40	0.39
4523	2,361.4	33.09829808	-103.57526541	76.41	-0.05	72.93	0.37
4524	2,362.0	33.09829637	-103.57526025	58.67	-0.02	70.27	0.38
4525	2,362.5	33.09829516	-103.57525549	52.23	-0.08	61.21	0.31
4526	2,363.0	33.09829514	-103.57525148	44.38	-0.02	52.70	0.35

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4527	2,363.5	33.09829593	-103.57524797	41.99	-0.06	47.97	0.32
4528	2,364.0	33.09829853	-103.57524538	48.44	-0.06	51.88	0.29
4529	2,364.6	33.09830197	-103.57524321	54.41	0.00	48.24	0.32
4530	2,365.1	33.09830604	-103.57524273	75.78	-0.02	55.94	0.30
4531	2,365.6	33.09831032	-103.57524275	88.87	-0.03	76.45	0.31
4532	2,366.1	33.09831465	-103.57524445	97.73	-0.05	83.28	0.26
4533	2,366.7	33.09831899	-103.57524645	111.72	-0.03	90.78	0.36
4534	2,367.2	33.09832350	-103.57524987	118.01	-0.10	92.11	0.29
4535	2,367.7	33.09832803	-103.57525340	132.73	-0.04	102.03	0.36
4536	2,368.2	33.09833234	-103.57525690	145.90	-0.09	110.16	0.35
4537	2,368.7	33.09833666	-103.57526044	160.04	-0.07	120.98	0.38
4538	2,369.3	33.09834103	-103.57526427	162.23	-0.08	125.55	0.37
4539	2,369.8	33.09834532	-103.57526812	156.45	-0.03	127.11	0.43
4540	2,370.3	33.09834925	-103.57527207	157.46	-0.04	155.31	0.47
4541	2,370.8	33.09835302	-103.57527589	146.68	-0.08	157.07	0.41
4542	2,371.4	33.09835633	-103.57527932	143.36	-0.06	153.16	0.46
4543	2,371.9	33.09835926	-103.57528232	150.20	-0.07	166.21	0.51
4544	2,372.4	33.09836154	-103.57528459	142.19	-0.08	167.15	0.52
4545	2,372.9	33.09836408	-103.57528676	126.52	-0.09	147.77	0.49
4546	2,373.4	33.09836698	-103.57528882	131.60	-0.07	129.49	0.53
4547	2,374.0	33.09837016	-103.57529181	131.13	-0.04	143.28	0.55
4548	2,374.5	33.09837358	-103.57529559	115.82	-0.08	147.66	0.46
4549	2,375.0	33.09837728	-103.57530010	107.97	-0.05	138.09	0.49
4550	2,375.5	33.09838115	-103.57530506	104.10	-0.11	129.14	0.42
4551	2,376.0	33.09838497	-103.57531033	95.12	-0.05	116.09	0.44
4552	2,376.6	33.09838876	-103.57531572	80.04	-0.02	100.63	0.38
4553	2,377.1	33.09839288	-103.57531986	69.73	0.05	92.73	0.41
4554	2,377.6	33.09839709	-103.57532365	61.95	-0.04	82.81	0.37
4555	2,378.1	33.09840288	-103.57532361	51.72	0.03	76.88	0.39
4556	2,378.7	33.09840886	-103.57532303	53.98	-0.02	76.33	0.42
4557	2,379.2	33.09841134	-103.57531746	54.02	0.05	72.62	0.42
4558	2,379.7	33.09841352	-103.57531161	66.25	-0.01	69.02	0.40
4559	2,380.2	33.09841258	-103.57530457	75.39	0.00	65.16	0.39
4560	2,380.8	33.09841149	-103.57529755	86.99	0.00	82.70	0.43
4561	2,381.3	33.09840943	-103.57529073	86.02	-0.01	86.99	0.38
4562	2,381.8	33.09840725	-103.57528395	85.35	0.01	92.15	0.40
4563	2,382.3	33.09840459	-103.57527739	91.29	0.01	100.59	0.45
4564	2,382.8	33.09840187	-103.57527081	92.23	0.04	107.46	0.50
4565	2,383.4	33.09839907	-103.57526432	97.31	0.00	109.49	0.47
4566	2,383.9	33.09839611	-103.57525792	94.10	0.07	115.51	0.52
4567	2,384.4	33.09839294	-103.57525173	100.66	-0.05	117.54	0.39
4568	2,384.9	33.09838982	-103.57524576	99.45	0.06	122.19	0.49
4569	2,385.5	33.09838675	-103.57524002	105.98	-0.05	120.78	0.46
4570	2,386.0	33.09838380	-103.57523452	103.20	0.00	107.54	0.50
4571	2,386.5	33.09838096	-103.57522925	107.73	-0.02	109.53	0.46
4572	2,387.0	33.09837794	-103.57522377	104.10	0.01	121.60	0.46
4573	2,387.5	33.09837482	-103.57521821	102.11	-0.03	120.86	0.44
4574	2,388.1	33.09837150	-103.57521263	106.68	0.00	120.27	0.45
4575	2,388.6	33.09836811	-103.57520705	117.07	-0.01	118.95	0.46
4576	2,389.1	33.09836436	-103.57520158	127.70	-0.01	122.46	0.45
4577	2,389.6	33.09836053	-103.57519613	125.59	-0.01	115.74	0.44
4578	2,390.1	33.09835688	-103.57519122	119.49	-0.08	106.80	0.38
4579	2,390.7	33.09835326	-103.57518640	110.27	-0.04	106.13	0.37
4580	2,391.2	33.09834991	-103.57518117	112.03	-0.17	106.95	0.25
4581	2,391.7	33.09834664	-103.57517609	89.41	-0.04	99.81	0.35
4582	2,392.2	33.09834439	-103.57517324	78.91	-0.09	91.02	0.31
4583	2,392.8	33.09834289	-103.57517069	67.54	-0.03	84.57	0.34
4584	2,393.3	33.09834559	-103.57516982	69.49	-0.04	82.77	0.29
4585	2,393.8	33.09834880	-103.57516958	93.75	-0.04	90.86	0.32
4586	2,394.3	33.09835368	-103.57517139	99.26	-0.03	93.56	0.34
4587	2,394.9	33.09835855	-103.57517361	108.52	-0.02	106.91	0.34
4588	2,395.4	33.09836343	-103.57517675	110.35	-0.01	128.75	0.39

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4589	2,395.9	33.09836831	-103.57517998	110.82	-0.01	119.18	0.42
4590	2,396.4	33.09837317	-103.57518334	105.74	0.02	123.98	0.43
4591	2,396.9	33.09837813	-103.57518668	95.82	-0.04	122.58	0.37
4592	2,397.5	33.09838320	-103.57518998	83.52	0.02	113.71	0.44
4593	2,398.0	33.09838844	-103.57519315	77.07	-0.01	105.23	0.42
4594	2,398.5	33.09839381	-103.57519623	71.41	0.02	104.84	0.44
4595	2,399.0	33.09839918	-103.57519901	66.99	-0.01	99.61	0.40
4596	2,399.6	33.09840455	-103.57520163	67.34	0.01	97.38	0.39
4597	2,400.1	33.09840988	-103.57520469	58.52	0.02	87.54	0.39
4598	2,400.6	33.09841518	-103.57520790	56.25	0.07	82.77	0.42
4599	2,401.1	33.09842072	-103.57521062	61.25	0.02	85.35	0.37
4600	2,401.6	33.09842632	-103.57521325	67.31	-0.02	85.78	0.31
4601	2,402.2	33.09843191	-103.57521584	68.16	0.02	89.65	0.36
4602	2,402.7	33.09843753	-103.57521843	77.50	-0.06	92.34	0.28
4603	2,403.2	33.09844313	-103.57522113	77.34	0.03	89.57	0.35
4604	2,403.7	33.09844874	-103.57522384	83.59	-0.09	79.26	0.22
4605	2,404.3	33.09845442	-103.57522664	84.69	0.03	83.71	0.33
4606	2,404.8	33.09846017	-103.57522937	86.45	-0.08	87.50	0.26
4607	2,405.3	33.09846554	-103.57523152	68.87	0.01	64.30	0.31
4608	2,405.8	33.09847111	-103.57523288	52.89	0.01	47.34	0.32
4609	2,406.3	33.09847698	-103.57523183	43.79	0.05	46.80	0.33
4610	2,406.9	33.09848144	-103.57522906	40.51	0.01	47.42	0.33
4611	2,407.4	33.09848310	-103.57522296	37.42	0.04	43.63	0.31
4612	2,407.9	33.09848294	-103.57521687	44.22	0.01	44.06	0.32
4613	2,408.4	33.09848034	-103.57521082	50.90	0.01	43.71	0.32
4614	2,409.0	33.09847711	-103.57520511	64.65	0.03	53.20	0.35
4615	2,409.5	33.09847327	-103.57519973	74.06	-0.01	67.70	0.29
4616	2,410.0	33.09846912	-103.57519447	79.57	0.03	66.25	0.31
4617	2,410.5	33.09846477	-103.57518931	90.70	-0.06	87.70	0.27
4618	2,411.0	33.09846031	-103.57518456	86.06	0.03	79.96	0.34
4619	2,411.6	33.09845580	-103.57517998	88.05	-0.04	85.47	0.31
4620	2,412.1	33.09845141	-103.57517542	81.76	0.05	90.16	0.40
4621	2,412.6	33.09844705	-103.57517086	83.40	-0.04	91.02	0.34
4622	2,413.1	33.09844280	-103.57516677	82.70	0.02	94.77	0.41
4623	2,413.7	33.09843854	-103.57516275	80.90	-0.01	89.69	0.43
4624	2,414.2	33.09843431	-103.57515952	84.69	0.01	100.43	0.43
4625	2,414.7	33.09843009	-103.57515636	85.16	0.02	107.77	0.42
4626	2,415.2	33.09842567	-103.57515383	82.97	-0.01	96.84	0.42
4627	2,415.7	33.09842126	-103.57515126	87.50	0.05	101.99	0.47
4628	2,416.3	33.09841699	-103.57514840	95.04	-0.01	121.41	0.47
4629	2,416.8	33.09841282	-103.57514557	94.41	0.03	117.89	0.51
4630	2,417.3	33.09840900	-103.57514281	95.74	0.01	109.10	0.50
4631	2,417.8	33.09840539	-103.57514015	101.37	0.03	120.00	0.50
4632	2,418.4	33.09840229	-103.57513772	90.74	0.03	120.47	0.52
4633	2,418.9	33.09839880	-103.57513536	91.45	-0.01	116.56	0.50
4634	2,419.4	33.09839457	-103.57513311	95.23	0.05	125.86	0.51
4635	2,419.9	33.09839013	-103.57513076	90.16	0.01	120.04	0.48
4636	2,420.4	33.09838544	-103.57512831	89.18	0.04	105.86	0.47
4637	2,421.0	33.09838048	-103.57512555	98.16	0.00	118.01	0.46
4638	2,421.5	33.09837529	-103.57512252	104.14	-0.01	123.75	0.44
4639	2,422.0	33.09836998	-103.57511927	104.49	0.02	108.75	0.43
4640	2,422.5	33.09836458	-103.57511586	99.10	-0.03	105.78	0.41
4641	2,423.1	33.09836020	-103.57511313	98.44	0.03	110.04	0.43
4642	2,423.6	33.09835626	-103.57511070	91.88	-0.04	107.73	0.40
4643	2,424.1	33.09835446	-103.57510770	93.87	-0.04	85.04	0.41
4644	2,424.6	33.09835325	-103.57510453	83.05	-0.09	84.22	0.35
4645	2,425.1	33.09835577	-103.57510189	79.14	-0.05	92.62	0.38
4646	2,425.7	33.09835884	-103.57509934	83.32	-0.05	100.86	0.42
4647	2,426.2	33.09836453	-103.57509849	84.14	-0.02	89.45	0.46
4648	2,426.7	33.09837039	-103.57509777	83.91	-0.03	100.59	0.46
4649	2,427.2	33.09837646	-103.57509795	84.57	-0.01	109.96	0.45
4650	2,427.8	33.09838250	-103.57509812	77.66	0.01	101.06	0.45

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4651	2,428.3	33.09838841	-103.57509820	81.29	0.01	108.79	0.47
4652	2,428.8	33.09839435	-103.57509832	83.16	0.04	110.35	0.51
4653	2,429.3	33.09840048	-103.57509859	91.41	-0.02	108.05	0.45
4654	2,429.8	33.09840663	-103.57509893	92.31	0.05	115.78	0.52
4655	2,430.4	33.09841242	-103.57509944	96.64	-0.03	124.34	0.49
4656	2,430.9	33.09841839	-103.57510010	94.34	0.04	113.98	0.55
4657	2,431.4	33.09842451	-103.57510100	97.27	-0.04	118.20	0.47
4658	2,431.9	33.09843053	-103.57510170	86.13	0.04	116.95	0.54
4659	2,432.5	33.09843643	-103.57510216	86.60	-0.03	109.92	0.46
4660	2,433.0	33.09844238	-103.57510260	83.63	0.02	110.35	0.48
4661	2,433.5	33.09844836	-103.57510302	83.13	-0.03	108.91	0.43
4662	2,434.0	33.09845407	-103.57510341	73.79	0.01	99.88	0.45
4663	2,434.5	33.09845960	-103.57510376	66.84	-0.02	89.57	0.41
4664	2,435.1	33.09846555	-103.57510410	62.77	0.02	83.09	0.42
4665	2,435.6	33.09847166	-103.57510442	59.41	-0.02	76.80	0.41
4666	2,436.1	33.09847776	-103.57510485	58.87	0.00	71.80	0.39
4667	2,436.6	33.09848382	-103.57510531	56.76	0.01	66.29	0.41
4668	2,437.2	33.09848970	-103.57510602	59.53	0.00	63.79	0.39
4669	2,437.7	33.09849554	-103.57510676	55.39	0.01	62.42	0.40
4670	2,438.2	33.09850085	-103.57510710	59.57	-0.06	63.91	0.33
4671	2,438.7	33.09850615	-103.57510733	51.60	0.02	57.58	0.40
4672	2,439.2	33.09851136	-103.57510621	49.53	-0.05	50.63	0.34
4673	2,439.8	33.09851646	-103.57510473	41.29	0.04	43.20	0.42
4674	2,440.3	33.09852083	-103.57510111	38.52	0.01	41.37	0.41
4675	2,440.8	33.09852419	-103.57509685	34.30	0.02	39.84	0.42
4676	2,441.3	33.09852422	-103.57509051	35.55	0.03	38.79	0.43
4677	2,441.9	33.09852278	-103.57508468	47.34	-0.04	39.41	0.35
4678	2,442.4	33.09851823	-103.57507995	49.38	0.06	44.73	0.44
4679	2,442.9	33.09851350	-103.57507570	55.78	-0.05	50.98	0.42
4680	2,443.4	33.09850855	-103.57507216	53.52	0.00	56.33	0.47
4681	2,443.9	33.09850344	-103.57506898	55.74	-0.04	58.13	0.43
4682	2,444.5	33.09849816	-103.57506616	55.90	0.01	60.74	0.45
4683	2,445.0	33.09849297	-103.57506390	59.30	-0.04	64.10	0.45
4684	2,445.5	33.09848783	-103.57506205	62.03	-0.02	70.39	0.46
4685	2,446.0	33.09848276	-103.57506012	65.82	0.01	76.02	0.47
4686	2,446.5	33.09847773	-103.57505814	74.18	-0.07	82.62	0.39
4687	2,447.1	33.09847289	-103.57505596	70.16	0.05	83.16	0.46
4688	2,447.6	33.09846812	-103.57505371	75.27	-0.02	90.66	0.47
4689	2,448.1	33.09846325	-103.57505148	69.49	0.08	92.34	0.49
4690	2,448.6	33.09845838	-103.57504927	69.02	0.01	93.52	0.50
4691	2,449.2	33.09845331	-103.57504817	69.49	0.03	96.37	0.52
4692	2,449.7	33.09844821	-103.57504718	81.72	-0.07	101.68	0.41
4693	2,450.2	33.09844287	-103.57504661	77.19	0.05	104.88	0.52
4694	2,450.7	33.09843757	-103.57504604	77.46	0.00	104.96	0.51
4695	2,451.2	33.09843262	-103.57504515	79.38	0.03	104.30	0.56
4696	2,451.8	33.09842749	-103.57504427	82.38	0.03	104.65	0.58
4697	2,452.3	33.09842241	-103.57504355	89.65	-0.02	109.92	0.53
4698	2,452.8	33.09841712	-103.57504275	87.97	0.05	113.05	0.60
4699	2,453.3	33.09841158	-103.57504172	93.95	-0.05	116.25	0.53
4700	2,453.9	33.09840614	-103.57504067	90.27	0.05	114.53	0.61
4701	2,454.4	33.09840091	-103.57503956	94.18	-0.03	111.88	0.54
4702	2,454.9	33.09839573	-103.57503835	91.17	0.05	115.63	0.58
4703	2,455.4	33.09839057	-103.57503699	91.80	0.00	118.75	0.56
4704	2,455.9	33.09838549	-103.57503547	91.41	0.03	118.59	0.56
4705	2,456.5	33.09838047	-103.57503377	90.98	0.00	115.70	0.58
4706	2,457.0	33.09837568	-103.57503251	88.48	0.01	114.34	0.58
4707	2,457.5	33.09837103	-103.57503154	87.58	0.06	115.23	0.62
4708	2,458.0	33.09836688	-103.57503092	88.20	-0.08	113.87	0.50
4709	2,458.6	33.09836294	-103.57503045	76.45	0.02	101.48	0.53
4710	2,459.1	33.09835894	-103.57502961	72.97	-0.05	95.63	0.51
4711	2,459.6	33.09835491	-103.57502866	70.16	-0.05	93.83	0.51
4712	2,460.1	33.09835176	-103.57502646	64.81	-0.05	90.08	0.49

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4713	2,460.6	33.09834876	-103.57502404	64.53	-0.11	85.12	0.42
4714	2,461.2	33.09834830	-103.57502049	60.47	-0.06	82.31	0.48
4715	2,461.7	33.09834809	-103.57501685	60.74	-0.13	77.77	0.42
4716	2,462.2	33.09835059	-103.57501316	60.43	-0.07	80.39	0.48
4717	2,462.7	33.09835327	-103.57500959	65.90	-0.08	88.28	0.51
4718	2,463.3	33.09835759	-103.57500721	84.77	-0.06	91.45	0.57
4719	2,463.8	33.09836197	-103.57500501	102.07	-0.03	101.76	0.62
4720	2,464.3	33.09836665	-103.57500361	117.11	-0.08	114.65	0.59
4721	2,464.8	33.09837137	-103.57500244	118.87	-0.02	123.13	0.67
4722	2,465.3	33.09837619	-103.57500189	120.31	-0.07	128.13	0.64
4723	2,465.9	33.09838088	-103.57500146	117.42	-0.01	127.77	0.68
4724	2,466.4	33.09838531	-103.57500123	112.89	-0.04	124.96	0.67
4725	2,466.9	33.09838991	-103.57500097	109.57	-0.03	126.45	0.68
4726	2,467.4	33.09839473	-103.57500067	101.21	0.02	121.76	0.69
4727	2,468.0	33.09839941	-103.57500014	100.90	-0.10	119.77	0.58
4728	2,468.5	33.09840393	-103.57499939	94.61	-0.03	117.89	0.62
4729	2,469.0	33.09840878	-103.57499908	96.29	-0.08	113.32	0.60
4730	2,469.5	33.09841382	-103.57499906	93.52	-0.05	109.92	0.61
4731	2,470.1	33.09841893	-103.57499906	88.59	-0.01	109.69	0.66
4732	2,470.6	33.09842404	-103.57499908	91.80	-0.05	113.09	0.63
4733	2,471.1	33.09842932	-103.57499913	84.84	-0.01	109.18	0.65
4734	2,471.6	33.09843465	-103.57499919	88.32	-0.10	107.11	0.55
4735	2,472.1	33.09843999	-103.57500012	87.38	-0.01	106.25	0.66
4736	2,472.7	33.09844533	-103.57500118	95.12	-0.07	105.98	0.62
4737	2,473.2	33.09845074	-103.57500217	95.43	-0.01	104.88	0.63
4738	2,473.7	33.09845618	-103.57500315	95.27	-0.03	102.77	0.60
4739	2,474.2	33.09846184	-103.57500407	95.20	-0.03	101.09	0.58
4740	2,474.7	33.09846746	-103.57500499	89.41	-0.02	100.04	0.58
4741	2,475.3	33.09847259	-103.57500590	92.89	-0.02	98.36	0.58
4742	2,475.8	33.09847760	-103.57500679	86.80	-0.02	94.73	0.59
4743	2,476.3	33.09848194	-103.57500756	89.69	-0.11	89.53	0.51
4744	2,476.8	33.09848666	-103.57500844	82.19	0.03	83.48	0.57
4745	2,477.4	33.09849189	-103.57500954	82.73	-0.09	82.70	0.40
4746	2,477.9	33.09849724	-103.57501075	71.06	-0.01	80.78	0.51
4747	2,478.4	33.09850269	-103.57501212	66.76	-0.05	75.43	0.50
4748	2,478.9	33.09850801	-103.57501356	60.00	0.01	70.74	0.48
4749	2,479.4	33.09851314	-103.57501508	61.02	-0.02	68.98	0.46
4750	2,480.0	33.09851847	-103.57501682	56.56	-0.05	62.54	0.40
4751	2,480.5	33.09852393	-103.57501874	51.95	-0.02	57.85	0.48
4752	2,481.0	33.09852847	-103.57502027	44.88	-0.05	53.24	0.39
4753	2,481.5	33.09853247	-103.57502159	49.88	-0.02	53.28	0.56
4754	2,482.1	33.09853454	-103.57502228	55.04	0.02	53.75	0.61
4755	2,482.6	33.09853586	-103.57502272	56.06	0.04	54.10	0.66
4756	2,483.1	33.09853740	-103.57502234	47.77	0.03	51.41	0.68
4757	2,483.6	33.09853899	-103.57502174	34.26	0.09	48.63	0.69
4758	2,484.1	33.09853853	-103.57502009	34.81	0.08	48.83	0.63
4759	2,484.7	33.09853782	-103.57501830	39.84	0.02	46.48	0.44
4760	2,485.2	33.09853622	-103.57501329	39.45	0.03	45.12	0.34
4761	2,485.7	33.09853447	-103.57500825	31.29	0.13	46.84	0.43
4762	2,486.2	33.09853084	-103.57500403	41.48	0.03	51.76	0.40
4763	2,486.8	33.09852699	-103.57500005	49.65	-0.05	55.78	0.30
4764	2,487.3	33.09852182	-103.57499737	50.90	0.02	61.84	0.38
4765	2,487.8	33.09851661	-103.57499498	60.74	-0.08	66.88	0.37
4766	2,488.3	33.09851120	-103.57499351	69.92	-0.09	73.36	0.38
4767	2,488.9	33.09850563	-103.57499217	71.80	-0.03	78.56	0.44
4768	2,489.4	33.09849968	-103.57499107	77.85	-0.08	84.26	0.45
4769	2,489.9	33.09849377	-103.57499040	74.30	-0.03	85.43	0.42
4770	2,490.4	33.09848787	-103.57499035	88.63	-0.11	90.51	0.39
4771	2,490.9	33.09848221	-103.57498984	89.77	-0.02	89.96	0.51
4772	2,491.5	33.09847676	-103.57498881	94.18	-0.08	91.56	0.51
4773	2,492.0	33.09847126	-103.57498804	93.91	0.00	100.27	0.55
4774	2,492.5	33.09846570	-103.57498746	94.69	-0.02	104.88	0.56

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4775	2,493.0	33.09846015	-103.57498731	101.17	-0.05	104.65	0.55
4776	2,493.5	33.09845458	-103.57498738	100.23	0.04	105.16	0.64
4777	2,494.1	33.09844918	-103.57498727	102.07	-0.04	107.73	0.63
4778	2,494.6	33.09844380	-103.57498711	92.38	0.01	103.83	0.67
4779	2,495.1	33.09843823	-103.57498679	95.04	-0.08	107.50	0.60
4780	2,495.6	33.09843260	-103.57498645	90.31	-0.01	109.18	0.64
4781	2,496.1	33.09842738	-103.57498589	90.20	-0.06	109.81	0.60
4782	2,496.7	33.09842220	-103.57498530	88.75	-0.01	110.74	0.65
4783	2,497.2	33.09841669	-103.57498465	92.38	-0.05	109.02	0.62
4784	2,497.7	33.09841125	-103.57498397	103.87	-0.07	113.71	0.61
4785	2,498.2	33.09840649	-103.57498299	102.93	-0.04	113.56	0.63
4786	2,498.8	33.09840168	-103.57498197	113.52	-0.07	121.64	0.63
4787	2,499.3	33.09839728	-103.57498092	120.59	0.01	131.02	0.73
4788	2,499.8	33.09839309	-103.57498010	124.02	-0.02	135.70	0.70
4789	2,500.3	33.09838984	-103.57498004	125.55	0.00	139.22	0.71
4790	2,500.9	33.09838630	-103.57497975	126.41	0.00	138.91	0.71
4791	2,501.4	33.09838219	-103.57497899	132.97	-0.02	141.64	0.69
4792	2,501.9	33.09837779	-103.57497870	144.22	-0.02	147.03	0.68
4793	2,502.4	33.09837304	-103.57497904	143.95	-0.01	145.90	0.66
4794	2,502.9	33.09836813	-103.57497937	143.75	-0.12	145.86	0.56
4795	2,503.5	33.09836308	-103.57497968	141.09	-0.02	143.20	0.64
4796	2,504.0	33.09835757	-103.57497959	127.77	-0.07	126.06	0.58
4797	2,504.5	33.09835172	-103.57497921	99.26	-0.02	104.49	0.54
4798	2,505.0	33.09834612	-103.57497863	67.15	-0.05	85.94	0.47
4799	2,505.6	33.09834062	-103.57497795	56.52	-0.05	82.38	0.44
4800	2,506.1	33.09833488	-103.57497714	52.93	-0.03	78.44	0.44
4801	2,506.6	33.09832909	-103.57497629	61.06	-0.09	76.52	0.41
4802	2,507.1	33.09832382	-103.57497531	58.59	0.00	71.33	0.52
4803	2,507.6	33.09831865	-103.57497430	61.64	-0.08	67.89	0.46
4804	2,508.2	33.09831322	-103.57497351	57.70	-0.03	62.81	0.48
4805	2,508.7	33.09830775	-103.57497275	59.49	-0.11	63.59	0.38
4806	2,509.2	33.09830217	-103.57497244	60.70	-0.05	72.27	0.40
4807	2,509.7	33.09829660	-103.57497208	64.10	-0.07	69.96	0.39
4808	2,510.3	33.09829109	-103.57497126	79.38	-0.11	67.77	0.37
4809	2,510.8	33.09828591	-103.57497044	72.97	-0.09	62.89	0.38
4810	2,511.3	33.09828229	-103.57496958	66.09	-0.08	65.59	0.32
4811	2,511.8	33.09827954	-103.57496784	62.62	-0.09	70.35	0.30
4812	2,512.3	33.09827917	-103.57496375	74.30	-0.10	77.97	0.32
4813	2,512.9	33.09827987	-103.57495971	81.48	-0.07	89.41	0.35
4814	2,513.4	33.09828244	-103.57495577	88.67	-0.11	99.34	0.32
4815	2,513.9	33.09828548	-103.57495277	97.34	-0.07	111.02	0.37
4816	2,514.4	33.09828909	-103.57495098	102.07	-0.09	119.81	0.38
4817	2,515.0	33.09829301	-103.57494958	111.99	-0.10	131.17	0.39
4818	2,515.5	33.09829718	-103.57494855	121.21	-0.07	140.90	0.45
4819	2,516.0	33.09830072	-103.57494728	131.33	-0.14	147.23	0.41
4820	2,516.5	33.09830387	-103.57494585	138.16	-0.09	157.73	0.45
4821	2,517.0	33.09830714	-103.57494447	140.20	-0.08	164.02	0.47
4822	2,517.6	33.09831045	-103.57494311	139.81	-0.11	165.23	0.43
4823	2,518.1	33.09831295	-103.57494088	147.70	-0.10	169.92	0.47
4824	2,518.6	33.09831522	-103.57493841	149.73	-0.06	172.07	0.51
4825	2,519.1	33.09831714	-103.57493553	145.51	-0.06	168.95	0.49
4826	2,519.7	33.09831901	-103.57493258	134.18	-0.09	159.65	0.44
4827	2,520.2	33.09832100	-103.57492908	128.79	-0.04	154.41	0.47
4828	2,520.7	33.09832297	-103.57492555	128.95	-0.04	151.72	0.46
4829	2,521.2	33.09832426	-103.57492193	136.84	-0.04	153.44	0.24
4830	2,521.7	33.09832565	-103.57491832	130.86	-0.05	157.15	0.35
4831	2,522.3	33.09832777	-103.57491481	129.69	-0.06	151.29	0.30
4832	2,522.8	33.09832966	-103.57491153	117.42	-0.10	139.81	0.37
4833	2,523.3	33.09833068	-103.57490905	113.87	-0.07	138.36	0.43
4834	2,523.8	33.09833205	-103.57490679	116.52	-0.07	144.14	0.45
4835	2,524.4	33.09833415	-103.57490516	117.93	-0.11	151.09	0.41
4836	2,524.9	33.09833635	-103.57490415	120.82	-0.10	156.13	0.42

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4837	2,525.4	33.09833868	-103.57490424	120.59	-0.07	154.38	0.45
4838	2,525.9	33.09834113	-103.57490446	121.45	-0.08	153.59	0.40
4839	2,526.4	33.09834375	-103.57490484	126.52	-0.11	160.63	0.41
4840	2,527.0	33.09834655	-103.57490540	140.35	-0.09	169.45	0.46
4841	2,527.5	33.09834951	-103.57490612	147.15	-0.07	171.72	0.47
4842	2,528.0	33.09835261	-103.57490622	151.25	-0.10	171.56	0.48
4843	2,528.5	33.09835582	-103.57490597	171.33	-0.06	179.77	0.53
4844	2,529.1	33.09835926	-103.57490625	180.16	-0.02	186.37	0.56
4845	2,529.6	33.09836279	-103.57490674	184.77	-0.06	196.41	0.54
4846	2,530.1	33.09836615	-103.57490655	196.17	-0.06	209.61	0.58
4847	2,530.6	33.09836949	-103.57490619	201.84	-0.03	213.91	0.60
4848	2,531.1	33.09837308	-103.57490601	205.43	-0.04	215.94	0.59
4849	2,531.7	33.09837670	-103.57490584	216.52	-0.06	222.46	0.60
4850	2,532.2	33.09838050	-103.57490612	213.63	-0.03	221.37	0.68
4851	2,532.7	33.09838430	-103.57490639	217.50	-0.05	225.00	0.68
4852	2,533.2	33.09838800	-103.57490650	220.90	-0.05	233.56	0.69
4853	2,533.8	33.09839165	-103.57490657	220.16	-0.04	241.41	0.65
4854	2,534.3	33.09839497	-103.57490640	223.48	-0.11	244.57	0.62
4855	2,534.8	33.09839804	-103.57490655	223.59	-0.06	243.24	0.63
4856	2,535.3	33.09840027	-103.57490778	221.64	-0.06	243.20	0.63
4857	2,535.8	33.09840272	-103.57490876	223.28	-0.11	244.41	0.61
4858	2,536.4	33.09840570	-103.57490918	224.73	-0.07	239.06	0.62
4859	2,536.9	33.09840901	-103.57491011	209.02	-0.03	219.34	0.65
4860	2,537.4	33.09841285	-103.57491179	198.67	-0.08	208.05	0.63
4861	2,537.9	33.09841697	-103.57491339	202.66	-0.05	221.95	0.66
4862	2,538.5	33.09842137	-103.57491491	196.02	-0.02	223.59	0.68
4863	2,539.0	33.09842559	-103.57491662	192.07	-0.10	215.20	0.59
4864	2,539.5	33.09842967	-103.57491849	177.73	-0.05	202.58	0.66
4865	2,540.0	33.09843373	-103.57492028	171.76	-0.03	197.27	0.68
4866	2,540.5	33.09843775	-103.57492203	170.31	-0.03	205.35	0.69
4867	2,541.1	33.09844103	-103.57492434	166.84	0.01	205.94	0.73
4868	2,541.6	33.09844404	-103.57492684	151.56	-0.06	185.35	0.63
4869	2,542.1	33.09844757	-103.57492939	156.06	-0.05	174.92	0.63
4870	2,542.6	33.09845119	-103.57493193	152.93	-0.04	165.51	0.63
4871	2,543.1	33.09845525	-103.57493481	145.78	-0.09	156.17	0.61
4872	2,543.7	33.09845937	-103.57493772	134.61	-0.03	154.73	0.64
4873	2,544.2	33.09846376	-103.57494097	122.70	-0.09	151.09	0.59
4874	2,544.7	33.09846812	-103.57494415	115.86	-0.05	143.09	0.60
4875	2,545.2	33.09847188	-103.57494649	111.52	-0.08	136.60	0.57
4876	2,545.8	33.09847519	-103.57494848	109.30	-0.04	136.88	0.60
4877	2,546.3	33.09847599	-103.57494870	106.21	-0.03	136.25	0.60
4878	2,546.8	33.09847700	-103.57494940	107.58	-0.04	135.47	0.59
4879	2,547.3	33.09847859	-103.57495154	111.84	-0.03	135.23	0.58
4880	2,547.9	33.09848102	-103.57495381	112.23	-0.07	132.62	0.52
4881	2,548.4	33.09848514	-103.57495635	117.81	-0.03	132.66	0.58
4882	2,548.9	33.09848955	-103.57495915	121.06	-0.02	131.64	0.59
4883	2,549.4	33.09849432	-103.57496230	124.81	-0.15	133.36	0.45
4884	2,549.9	33.09849927	-103.57496516	118.32	-0.05	130.74	0.51
4885	2,550.5	33.09850438	-103.57496773	115.23	-0.11	125.27	0.47
4886	2,551.0	33.09850915	-103.57497045	114.22	-0.04	120.86	0.56
4887	2,551.5	33.09851367	-103.57497327	105.70	-0.10	111.84	0.48
4888	2,552.0	33.09851865	-103.57497640	100.27	-0.07	106.25	0.47
4889	2,552.6	33.09852383	-103.57497967	87.11	-0.05	96.33	0.50
4890	2,553.1	33.09852876	-103.57498342	85.63	-0.16	88.59	0.39
4891	2,553.6	33.09853361	-103.57498732	63.79	-0.07	73.71	0.43
4892	2,554.1	33.09853786	-103.57499096	49.02	-0.02	63.67	0.39
4893	2,554.6	33.09854200	-103.57499456	46.21	-0.04	59.18	0.44
4894	2,555.2	33.09854491	-103.57499712	44.18	-0.07	54.14	0.42
4895	2,555.7	33.09854768	-103.57499954	47.11	-0.06	51.99	0.51
4896	2,556.2	33.09854831	-103.57499830	49.45	-0.06	51.80	0.51
4897	2,556.7	33.09854910	-103.57499751	49.26	-0.06	51.72	0.49
4898	2,557.3	33.09855136	-103.57500073	40.66	-0.04	48.16	0.39

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4899	2,557.8	33.09855370	-103.57500244	36.13	0.02	44.77	0.32
4900	2,558.3	33.09855640	-103.57499761	36.45	0.00	43.28	0.27
4901	2,558.8	33.09855814	-103.57499254	38.40	-0.01	43.59	0.28
4902	2,559.3	33.09855728	-103.57498688	41.29	0.00	49.53	0.34
4903	2,559.9	33.09855590	-103.57498116	46.06	-0.02	54.53	0.32
4904	2,560.4	33.09855356	-103.57497533	53.59	-0.06	60.27	0.31
4905	2,560.9	33.09855115	-103.57496973	59.53	0.01	65.27	0.38
4906	2,561.4	33.09854865	-103.57496440	74.49	-0.07	74.02	0.39
4907	2,562.0	33.09854545	-103.57495915	82.85	-0.05	86.06	0.42
4908	2,562.5	33.09854160	-103.57495395	86.33	-0.03	92.58	0.47
4909	2,563.0	33.09853752	-103.57494908	96.48	-0.08	101.25	0.44
4910	2,563.5	33.09853330	-103.57494441	96.02	-0.03	106.80	0.51
4911	2,564.0	33.09852880	-103.57494026	100.39	-0.08	113.48	0.50
4912	2,564.6	33.09852418	-103.57493634	102.31	-0.04	117.89	0.50
4913	2,565.1	33.09851924	-103.57493278	111.84	-0.07	123.91	0.46
4914	2,565.6	33.09851422	-103.57492930	101.52	-0.53	123.71	-0.49
4915	2,566.1	33.09850950	-103.57492588	101.56	-0.50	132.66	0.25
4916	2,566.7	33.09850482	-103.57492246	119.65	-0.08	129.45	-0.83
4917	2,567.2	33.09850015	-103.57491904	129.30	-0.09	141.06	0.29
4918	2,567.7	33.09849550	-103.57491564	128.67	-0.05	146.68	0.49
4919	2,568.2	33.09849115	-103.57491243	125.16	-0.04	150.86	0.56
4920	2,568.7	33.09848682	-103.57490923	137.50	-0.09	156.88	0.54
4921	2,569.3	33.09848258	-103.57490603	139.10	-0.01	159.49	0.59
4922	2,569.8	33.09847839	-103.57490304	139.65	-0.09	160.12	0.54
4923	2,570.3	33.09847434	-103.57490080	145.98	-0.05	163.24	0.59
4924	2,570.8	33.09847052	-103.57489895	148.24	-0.08	163.87	0.62
4925	2,571.4	33.09846747	-103.57489810	153.95	-0.08	168.44	0.64
4926	2,571.9	33.09846460	-103.57489689	161.64	-0.05	179.81	0.67
4927	2,572.4	33.09846211	-103.57489510	165.35	-0.04	191.80	0.68
4928	2,572.9	33.09846050	-103.57489444	169.30	-0.02	200.00	0.69
4929	2,573.4	33.09845993	-103.57489507	173.40	0.03	203.75	0.75
4930	2,574.0	33.09845965	-103.57489539	174.06	0.05	203.44	0.75
4931	2,574.5	33.09845962	-103.57489545	173.56	0.05	201.91	0.75
4932	2,575.0	33.09845913	-103.57489465	174.02	0.05	202.38	0.76
4933	2,575.5	33.09845838	-103.57489335	174.96	0.06	200.98	0.76
4934	2,576.1	33.09845645	-103.57489191	165.86	0.00	191.45	0.68
4935	2,576.6	33.09845407	-103.57489041	165.51	-0.07	184.57	0.62
4936	2,577.1	33.09845097	-103.57488891	173.59	-0.04	184.49	0.65
4937	2,577.6	33.09844770	-103.57488740	173.36	-0.05	186.56	0.64
4938	2,578.1	33.09844399	-103.57488577	174.30	-0.07	196.64	0.62
4939	2,578.7	33.09844025	-103.57488414	170.63	0.02	193.71	0.69
4940	2,579.2	33.09843597	-103.57488199	169.41	-0.03	186.56	0.64
4941	2,579.7	33.09843169	-103.57487982	184.45	0.00	194.92	0.68
4942	2,580.2	33.09842758	-103.57487734	184.45	-0.03	209.53	0.60
4943	2,580.8	33.09842344	-103.57487480	198.63	-0.10	218.44	0.54
4944	2,581.3	33.09841928	-103.57487190	188.91	-0.06	206.48	0.53
4945	2,581.8	33.09841502	-103.57486929	177.15	-0.09	185.31	0.44
4946	2,582.3	33.09841037	-103.57486765	181.64	-0.05	182.54	0.51
4947	2,582.8	33.09840552	-103.57486590	189.81	-0.12	190.35	0.53
4948	2,583.4	33.09840027	-103.57486394	208.05	-0.08	212.42	0.61
4949	2,583.9	33.09839505	-103.57486185	210.16	-0.13	219.84	0.53
4950	2,584.4	33.09838992	-103.57485958	219.22	-0.13	220.98	0.45
4951	2,584.9	33.09838495	-103.57485710	206.91	-0.12	211.76	0.46
4952	2,585.5	33.09838015	-103.57485440	203.95	-0.11	209.77	0.49
4953	2,586.0	33.09837545	-103.57485138	199.45	-0.09	208.75	0.52
4954	2,586.5	33.09837083	-103.57484811	199.57	-0.11	205.98	0.50
4955	2,587.0	33.09836669	-103.57484336	183.28	-0.07	194.34	0.52
4956	2,587.5	33.09836282	-103.57483783	157.50	-0.09	167.62	0.47
4957	2,588.1	33.09836108	-103.57483289	130.31	-0.06	140.55	0.44
4958	2,588.6	33.09836010	-103.57482817	91.37	-0.11	92.97	0.30
4959	2,589.1	33.09836162	-103.57482461	78.83	-0.10	70.39	0.28
4960	2,589.6	33.09836367	-103.57482131	64.96	-0.12	65.20	0.29

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
4961	2,590.2	33.09836781	-103.57481965	72.42	-0.10	64.65	0.35
4962	2,590.7	33.09837216	-103.57481815	83.32	-0.10	69.96	0.40
4963	2,591.2	33.09837740	-103.57481938	99.57	-0.11	83.95	0.39
4964	2,591.7	33.09838271	-103.57482086	114.18	-0.10	91.29	0.33
4965	2,592.2	33.09838810	-103.57482375	138.09	-0.10	109.10	0.33
4966	2,592.8	33.09839344	-103.57482677	159.14	-0.08	129.30	0.43
4967	2,593.3	33.09839853	-103.57483046	162.31	-0.11	146.56	0.40
4968	2,593.8	33.09840343	-103.57483412	159.77	-0.07	155.08	0.43
4969	2,594.3	33.09840768	-103.57483764	147.70	-0.12	145.27	0.36
4970	2,594.9	33.09841188	-103.57484132	151.37	-0.04	143.44	0.47
4971	2,595.4	33.09841597	-103.57484533	155.08	-0.16	148.95	0.37
4972	2,595.9	33.09841970	-103.57484910	156.06	-0.09	154.61	0.41
4973	2,596.4	33.09842292	-103.57485255	154.10	-0.11	159.14	0.38
4974	2,596.9	33.09842596	-103.57485590	168.36	-0.05	172.11	0.46
4975	2,597.5	33.09842883	-103.57485916	184.49	-0.12	182.93	0.48
4976	2,598.0	33.09843114	-103.57486180	187.97	-0.12	191.06	0.48
4977	2,598.5	33.09843307	-103.57486403	177.46	-0.07	186.68	0.49
4978	2,599.0	33.09843461	-103.57486503	166.06	-0.07	180.59	0.47
4979	2,599.6	33.09843594	-103.57486544	172.31	-0.04	180.39	0.49
4980	2,600.1	33.09843838	-103.57486829	185.43	-0.03	182.15	0.53
4981	2,600.6	33.09844117	-103.57487192	176.99	-0.09	180.00	0.44
4982	2,601.1	33.09844492	-103.57487511	178.75	-0.06	187.62	0.53
4983	2,601.6	33.09844883	-103.57487821	164.06	-0.06	177.03	0.53
4984	2,602.2	33.09845230	-103.57488157	156.80	-0.09	182.73	0.50
4985	2,602.7	33.09845574	-103.57488496	154.65	-0.06	189.84	0.58
4986	2,603.2	33.09845868	-103.57488821	136.64	-0.09	175.90	0.48
4987	2,603.7	33.09846139	-103.57489119	140.31	-0.08	179.34	0.53
4988	2,604.3	33.09846201	-103.57489156	144.88	-0.06	181.37	0.54
4989	2,604.8	33.09846266	-103.57489197	150.08	-0.06	183.13	0.57
4990	2,605.3	33.09846337	-103.57489256	155.08	-0.05	185.27	0.58
4991	2,605.8	33.09846469	-103.57489383	159.14	-0.03	185.31	0.58
4992	2,606.3	33.09846763	-103.57489699	141.33	-0.08	169.53	0.45
4993	2,606.9	33.09847096	-103.57490019	144.77	-0.08	167.50	0.52
4994	2,607.4	33.09847501	-103.57490347	139.49	-0.05	162.38	0.60
4995	2,607.9	33.09847926	-103.57490672	143.91	-0.12	160.47	0.55
4996	2,608.4	33.09848378	-103.57490996	140.23	-0.06	160.66	0.59
4997	2,609.0	33.09848821	-103.57491300	138.16	-0.11	159.65	0.56
4998	2,609.5	33.09849257	-103.57491586	140.90	-0.08	157.46	0.57
4999	2,610.0	33.09849702	-103.57491919	140.63	-0.07	154.26	0.57
5000	2,610.5	33.09850149	-103.57492279	138.32	-0.08	151.45	0.54
5001	2,611.0	33.09850606	-103.57492626	132.70	-0.03	151.02	0.60
5002	2,611.6	33.09851068	-103.57492966	121.56	-0.09	142.93	0.57
5003	2,612.1	33.09851515	-103.57493317	113.01	-0.07	135.12	0.54
5004	2,612.6	33.09851957	-103.57493670	106.64	-0.12	128.40	0.44
5005	2,613.1	33.09852465	-103.57494047	101.29	-0.08	120.66	0.46
5006	2,613.7	33.09852983	-103.57494426	97.81	-0.09	114.92	0.46
5007	2,614.2	33.09853487	-103.57494755	91.76	-0.06	110.63	0.48
5008	2,614.7	33.09853988	-103.57495079	88.83	-0.07	105.16	0.49
5009	2,615.2	33.09854516	-103.57495398	87.85	-0.07	100.47	0.47
5010	2,615.7	33.09855038	-103.57495710	80.47	-0.03	95.16	0.48
5011	2,616.3	33.09855531	-103.57495983	75.12	-0.11	85.12	0.40
5012	2,616.8	33.09856049	-103.57496281	58.52	-0.06	71.41	0.42
5013	2,617.3	33.09856520	-103.57496580	49.65	-0.08	63.09	0.32
5014	2,617.8	33.09856979	-103.57496866	41.56	-0.03	55.70	0.39
5015	2,618.4	33.09857320	-103.57497068	41.64	-0.06	53.44	0.46
5016	2,618.9	33.09857572	-103.57497212	47.62	-0.05	53.71	0.53
5017	2,619.4	33.09857661	-103.57497249	49.38	-0.05	54.06	0.57
5018	2,619.9	33.09857864	-103.57497206	42.89	-0.02	51.64	0.57
5019	2,620.4	33.09858202	-103.57497070	40.63	-0.01	49.69	0.44
5020	2,621.0	33.09858352	-103.57496667	33.05	0.04	45.12	0.35
5021	2,621.5	33.09858345	-103.57496044	28.79	0.03	43.13	0.28
5022	2,622.0	33.09858222	-103.57495496	40.35	-0.04	47.62	0.23

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5023	2,622.5	33.09858030	-103.57494990	43.24	0.01	56.06	0.33
5024	2,623.1	33.09857783	-103.57494406	53.83	-0.06	66.52	0.37
5025	2,623.6	33.09857512	-103.57493788	65.74	-0.14	72.73	0.32
5026	2,624.1	33.09857233	-103.57493135	71.72	-0.07	79.22	0.38
5027	2,624.6	33.09856951	-103.57492473	81.41	-0.17	88.36	0.32
5028	2,625.1	33.09856654	-103.57491828	77.42	-0.07	90.90	0.40
5029	2,625.7	33.09856353	-103.57491184	80.82	-0.14	95.47	0.37
5030	2,626.2	33.09856035	-103.57490538	84.77	-0.05	99.77	0.45
5031	2,626.7	33.09855718	-103.57489890	85.39	-0.09	99.41	0.42
5032	2,627.2	33.09855430	-103.57489260	87.15	-0.05	99.57	0.42
5033	2,627.8	33.09855151	-103.57488632	90.47	-0.10	101.21	0.37
5034	2,628.3	33.09854926	-103.57488018	92.50	-0.07	103.36	0.39
5035	2,628.8	33.09854702	-103.57487434	93.71	-0.06	100.78	0.45
5036	2,629.3	33.09854484	-103.57486958	93.98	-0.13	103.20	0.42
5037	2,629.8	33.09854296	-103.57486458	76.72	-0.08	93.52	0.42
5038	2,630.4	33.09854176	-103.57485903	58.40	-0.03	75.16	0.30
5039	2,630.9	33.09854058	-103.57485364	47.38	0.04	71.17	0.33
5040	2,631.4	33.09853944	-103.57484849	51.84	-0.07	70.86	0.30
5041	2,631.9	33.09853818	-103.57484375	60.47	-0.11	70.35	0.39
5042	2,632.5	33.09853681	-103.57483949	67.07	-0.08	68.32	0.48
5043	2,633.0	33.09853548	-103.57483616	71.48	-0.11	65.66	0.46
5044	2,633.5	33.09853416	-103.57483353	73.05	-0.09	66.64	0.47
5045	2,634.0	33.09853349	-103.57483046	72.73	-0.08	66.52	0.42
5046	2,634.5	33.09853314	-103.57482713	72.46	-0.13	65.20	0.34
5047	2,635.1	33.09853275	-103.57482380	66.88	-0.11	57.46	0.34
5048	2,635.6	33.09853234	-103.57482045	56.29	-0.06	50.94	0.36
5049	2,636.1	33.09853315	-103.57481728	50.66	-0.12	50.04	0.30
5050	2,636.6	33.09853423	-103.57481415	45.43	-0.10	44.84	0.29
5051	2,637.1	33.09853813	-103.57481408	40.08	-0.12	41.48	0.25
5052	2,637.7	33.09854233	-103.57481433	45.16	-0.10	44.10	0.25
5053	2,638.2	33.09854681	-103.57481759	44.61	-0.08	49.49	0.23
5054	2,638.7	33.09855127	-103.57482111	53.05	-0.09	55.90	0.23
5055	2,639.2	33.09855507	-103.57482603	59.49	-0.11	55.70	0.28
5056	2,639.8	33.09855868	-103.57483115	70.20	-0.14	68.09	0.29
5057	2,640.3	33.09856122	-103.57483731	58.79	-0.10	66.33	0.37
5058	2,640.8	33.09856354	-103.57484340	53.87	-0.09	66.29	0.32
5059	2,641.3	33.09856522	-103.57484927	52.46	-0.07	66.68	0.33
5060	2,641.9	33.09856714	-103.57485493	63.01	-0.13	68.59	0.30
5061	2,642.4	33.09856953	-103.57486021	73.63	-0.08	78.20	0.40
5062	2,642.9	33.09857206	-103.57486497	81.45	-0.08	84.53	0.45
5063	2,643.4	33.09857478	-103.57486903	92.81	-0.07	90.35	0.50
5064	2,643.9	33.09857740	-103.57487311	92.97	-0.04	95.94	0.52
5065	2,644.5	33.09857992	-103.57487720	98.32	-0.10	103.44	0.48
5066	2,645.0	33.09858216	-103.57488114	97.31	-0.06	105.20	0.51
5067	2,645.5	33.09858420	-103.57488497	97.54	-0.07	103.79	0.46
5068	2,646.0	33.09858694	-103.57488919	103.56	-0.12	104.22	0.41
5069	2,646.6	33.09858999	-103.57489356	101.60	-0.06	104.26	0.44
5070	2,647.1	33.09859354	-103.57489800	103.36	-0.13	104.41	0.38
5071	2,647.6	33.09859723	-103.57490244	98.28	-0.07	102.34	0.43
5072	2,648.1	33.09860113	-103.57490731	87.11	-0.10	94.02	0.40
5073	2,648.6	33.09860506	-103.57491226	77.77	-0.06	85.08	0.41
5074	2,649.2	33.09860901	-103.57491655	58.67	-0.07	69.81	0.39
5075	2,649.7	33.09861294	-103.57492076	53.09	-0.05	66.56	0.43
5076	2,650.2	33.09861551	-103.57492445	51.33	-0.06	63.83	0.45
5077	2,650.7	33.09861809	-103.57492796	50.43	-0.10	60.31	0.41
5078	2,651.3	33.09862107	-103.57492995	49.34	-0.07	58.67	0.43
5079	2,651.8	33.09862438	-103.57493165	47.66	-0.06	56.45	0.43
5080	2,652.3	33.09862886	-103.57493198	48.05	-0.11	53.13	0.33
5081	2,652.8	33.09863295	-103.57493087	43.79	-0.05	50.00	0.35
5082	2,653.3	33.09863580	-103.57492575	42.81	-0.04	47.77	0.33
5083	2,653.9	33.09863712	-103.57492013	45.08	-0.06	49.96	0.33
5084	2,654.4	33.09863559	-103.57491353	48.24	-0.06	53.13	0.36

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5085	2,654.9	33.09863364	-103.57490762	53.83	-0.11	57.07	0.33
5086	2,655.4	33.09863115	-103.57490261	59.77	-0.05	63.28	0.37
5087	2,656.0	33.09862908	-103.57489837	68.83	-0.07	69.96	0.39
5088	2,656.5	33.09862741	-103.57489483	79.69	-0.09	77.97	0.43
5089	2,657.0	33.09862729	-103.57489129	81.41	-0.08	80.39	0.47
5090	2,657.5	33.09862818	-103.57488776	83.09	-0.12	79.49	0.42
5091	2,658.0	33.09862812	-103.57488499	85.82	-0.09	78.83	0.44
5092	2,658.6	33.09862766	-103.57488254	87.27	-0.05	80.08	0.48
5093	2,659.1	33.09862873	-103.57488083	80.47	-0.03	78.13	0.43
5094	2,659.6	33.09863023	-103.57487934	76.88	-0.10	77.62	0.34
5095	2,660.1	33.09862965	-103.57487642	79.14	-0.09	82.54	0.38
5096	2,660.7	33.09862873	-103.57487328	76.06	-0.09	84.18	0.39
5097	2,661.2	33.09862695	-103.57487130	79.14	-0.12	84.92	0.38
5098	2,661.7	33.09862517	-103.57486946	82.81	-0.08	85.00	0.45
5099	2,662.2	33.09862513	-103.57486990	83.79	-0.05	84.22	0.47
5100	2,662.7	33.09862515	-103.57487051	82.19	-0.03	83.52	0.46
5101	2,663.3	33.09862560	-103.57487233	62.66	-0.02	76.48	0.33
5102	2,663.8	33.09862634	-103.57487329	57.46	-0.03	70.86	0.24
5103	2,664.3	33.09862823	-103.57487081	53.09	-0.02	66.56	0.32
5104	2,664.8	33.09863055	-103.57486845	50.31	-0.06	60.35	0.32
5105	2,665.4	33.09863372	-103.57486654	47.19	-0.06	56.06	0.38
5106	2,665.9	33.09863678	-103.57486502	47.85	-0.06	52.85	0.45
5107	2,666.4	33.09863961	-103.57486423	48.91	-0.07	51.13	0.49
5108	2,666.9	33.09864186	-103.57486231	46.48	-0.05	49.18	0.49
5109	2,667.4	33.09864342	-103.57485902	31.84	0.10	40.63	0.43
5110	2,668.0	33.09864355	-103.57485450	23.01	0.20	33.63	0.32
5111	2,668.5	33.09864248	-103.57484893	20.98	0.14	31.13	0.27
5112	2,669.0	33.09864076	-103.57484324	21.72	0.02	29.77	0.25
5113	2,669.5	33.09863866	-103.57483746	20.47	0.01	26.64	0.23
5114	2,670.1	33.09863469	-103.57483240	24.18	-0.04	27.11	0.25
5115	2,670.6	33.09862995	-103.57482761	23.67	-0.03	28.79	0.27
5116	2,671.1	33.09862481	-103.57482408	24.41	-0.04	29.49	0.24
5117	2,671.6	33.09861957	-103.57482087	28.75	-0.09	30.90	0.26
5118	2,672.1	33.09861408	-103.57481846	30.27	-0.07	31.06	0.27
5119	2,672.7	33.09860855	-103.57481616	39.30	-0.11	34.38	0.18
5120	2,673.2	33.09860261	-103.57481408	39.02	-0.07	36.95	0.19
5121	2,673.7	33.09859665	-103.57481203	45.98	-0.10	42.34	0.18
5122	2,674.2	33.09859037	-103.57481012	48.52	-0.06	47.58	0.25
5123	2,674.8	33.09858412	-103.57480821	60.59	-0.12	54.77	0.26
5124	2,675.3	33.09857812	-103.57480625	58.40	-0.07	54.10	0.31
5125	2,675.8	33.09857217	-103.57480419	60.51	-0.13	54.53	0.25
5126	2,676.3	33.09856640	-103.57480183	50.66	-0.07	47.42	0.26
5127	2,676.8	33.09856068	-103.57479956	45.16	-0.11	41.99	0.23
5128	2,677.4	33.09855505	-103.57479753	39.26	-0.08	38.63	0.24
5129	2,677.9	33.09854933	-103.57479553	39.30	-0.10	36.80	0.23
5130	2,678.4	33.09854352	-103.57479361	36.33	-0.09	34.61	0.24
5131	2,678.9	33.09853844	-103.57479205	35.35	-0.09	32.11	0.26
5132	2,679.5	33.09853419	-103.57479091	31.06	-0.02	32.46	0.36
5133	2,680.0	33.09853006	-103.57479036	30.47	0.02	31.17	0.34
5134	2,680.5	33.09852603	-103.57479029	35.20	-0.11	31.17	0.25
5135	2,681.0	33.09852109	-103.57479031	37.34	-0.06	34.18	0.31
5136	2,681.5	33.09851569	-103.57479039	41.95	-0.11	36.60	0.27
5137	2,682.1	33.09851012	-103.57478990	42.77	-0.10	33.79	0.25
5138	2,682.6	33.09850452	-103.57478922	45.16	-0.13	35.04	0.23
5139	2,683.1	33.09849875	-103.57478802	43.95	-0.12	33.52	0.19
5140	2,683.6	33.09849295	-103.57478671	41.91	-0.10	32.93	0.24
5141	2,684.1	33.09848754	-103.57478540	43.98	-0.12	35.98	0.24
5142	2,684.7	33.09848220	-103.57478410	39.69	-0.09	37.42	0.28
5143	2,685.2	33.09847735	-103.57478218	37.15	-0.14	33.59	0.30
5144	2,685.7	33.09847256	-103.57478011	32.31	-0.10	30.70	0.34
5145	2,686.2	33.09846817	-103.57477628	31.56	-0.15	32.38	0.31
5146	2,686.8	33.09846394	-103.57477249	28.16	-0.09	31.37	0.32

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5147	2,687.3	33.09846048	-103.57476882	28.67	-0.13	28.44	0.30
5148	2,687.8	33.09845727	-103.57476494	19.22	0.01	25.12	0.38
5149	2,688.3	33.09845484	-103.57476038	26.76	-0.08	25.31	0.37
5150	2,688.9	33.09845273	-103.57475670	26.17	-0.05	26.64	0.43
5151	2,689.4	33.09845128	-103.57475483	17.70	0.08	27.15	0.44
5152	2,689.9	33.09845005	-103.57475295	24.18	-0.03	27.31	0.37
5153	2,690.4	33.09844915	-103.57475105	33.13	-0.16	28.98	0.36
5154	2,690.9	33.09844866	-103.57474823	29.34	-0.10	27.46	0.43
5155	2,691.5	33.09844860	-103.57474450	26.60	-0.06	26.02	0.42
5156	2,692.0	33.09844871	-103.57474003	28.67	-0.13	26.72	0.33
5157	2,692.5	33.09844895	-103.57473502	24.65	-0.06	25.08	0.39
5158	2,693.0	33.09844827	-103.57473024	27.70	-0.12	24.77	0.35
5159	2,693.6	33.09844715	-103.57472560	27.42	-0.12	25.35	0.30
5160	2,694.1	33.09844556	-103.57472002	24.69	-0.07	25.08	0.37
5161	2,694.6	33.09844381	-103.57471413	24.81	-0.07	24.38	0.34
5162	2,695.1	33.09844159	-103.57471097	19.81	0.00	23.63	0.38
5163	2,695.6	33.09843927	-103.57470833	23.48	-0.04	24.45	0.35
5164	2,696.2	33.09843583	-103.57470678	30.00	-0.17	25.63	0.25
5165	2,696.7	33.09843228	-103.57470532	23.87	-0.05	24.34	0.36
5166	2,697.2	33.09842674	-103.57470286	23.05	-0.07	24.96	0.36
5167	2,697.7	33.09842112	-103.57470050	22.62	-0.05	23.75	0.38
5168	2,698.3	33.09841497	-103.57469927	22.34	-0.04	24.77	0.41
5169	2,698.8	33.09840881	-103.57469820	24.65	-0.08	26.21	0.33
5170	2,699.3	33.09840296	-103.57469783	23.32	-0.05	25.98	0.37
5171	2,699.8	33.09839698	-103.57469740	29.53	-0.15	26.64	0.27
5172	2,700.3	33.09839074	-103.57469680	24.34	-0.06	27.42	0.34
5173	2,700.9	33.09838478	-103.57469649	26.72	-0.11	27.42	0.32
5174	2,701.4	33.09837936	-103.57469673	25.66	-0.06	27.66	0.34
5175	2,701.9	33.09837389	-103.57469685	27.27	-0.10	29.18	0.34
5176	2,702.4	33.09836830	-103.57469683	29.06	-0.09	30.78	0.36
5177	2,703.0	33.09836293	-103.57469698	28.56	-0.07	30.59	0.39
5178	2,703.5	33.09835777	-103.57469729	29.30	-0.11	31.09	0.39
5179	2,704.0	33.09835282	-103.57469757	29.69	-0.09	32.70	0.42
5180	2,704.5	33.09834801	-103.57469782	32.70	-0.12	34.69	0.40
5181	2,705.0	33.09834323	-103.57469830	34.30	-0.08	35.78	0.41
5182	2,705.6	33.09833845	-103.57469890	35.66	-0.09	35.74	0.42
5183	2,706.1	33.09833382	-103.57469902	41.29	-0.13	37.93	0.37
5184	2,706.6	33.09832920	-103.57469901	39.96	-0.08	40.74	0.40
5185	2,707.1	33.09832486	-103.57469982	46.33	-0.18	44.02	0.31
5186	2,707.7	33.09832054	-103.57470075	43.95	-0.06	45.20	0.39
5187	2,708.2	33.09831699	-103.57470026	42.23	-0.06	42.85	0.28
5188	2,708.7	33.09831352	-103.57469971	42.89	-0.10	44.73	0.24
5189	2,709.2	33.09831092	-103.57469993	48.75	-0.08	50.51	0.40
5190	2,709.7	33.09830816	-103.57470009	48.87	-0.09	52.23	0.42
5191	2,710.3	33.09830420	-103.57469988	50.43	-0.16	52.81	0.31
5192	2,710.8	33.09830018	-103.57469965	49.96	-0.08	55.23	0.37
5193	2,711.3	33.09829595	-103.57469931	51.56	-0.07	56.91	0.41
5194	2,711.8	33.09829143	-103.57469893	52.11	-0.09	58.75	0.37
5195	2,712.4	33.09828620	-103.57469846	52.89	-0.02	61.02	0.42
5196	2,712.9	33.09828127	-103.57469847	60.94	-0.14	62.27	0.31
5197	2,713.4	33.09827688	-103.57469931	53.95	-0.06	60.70	0.41
5198	2,713.9	33.09827264	-103.57470014	54.69	-0.07	60.70	0.41
5199	2,714.4	33.09826854	-103.57470096	61.17	-0.10	63.79	0.42
5200	2,715.0	33.09826468	-103.57470151	55.27	-0.04	61.64	0.43
5201	2,715.5	33.09826103	-103.57470183	53.95	-0.13	60.04	0.34
5202	2,716.0	33.09825771	-103.57470221	53.67	-0.11	59.30	0.37
5203	2,716.5	33.09825461	-103.57470263	50.27	-0.09	57.03	0.39
5204	2,717.1	33.09825075	-103.57470288	48.79	-0.12	55.00	0.34
5205	2,717.6	33.09824661	-103.57470306	48.13	-0.08	54.10	0.38
5206	2,718.1	33.09824281	-103.57470347	46.52	-0.06	52.81	0.40
5207	2,718.6	33.09823912	-103.57470394	52.11	-0.17	52.03	0.31
5208	2,719.1	33.09823582	-103.57470458	45.78	-0.04	51.33	0.41

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5209	2,719.7	33.09823259	-103.57470524	43.01	-0.07	50.00	0.45
5210	2,720.2	33.09823036	-103.57470589	44.06	-0.11	49.45	0.43
5211	2,720.7	33.09822812	-103.57470653	40.39	-0.06	47.42	0.45
5212	2,721.2	33.09822498	-103.57470689	38.87	-0.07	46.84	0.41
5213	2,721.8	33.09822178	-103.57470744	40.20	-0.14	44.26	0.33
5214	2,722.3	33.09821802	-103.57470917	38.79	-0.09	43.95	0.34
5215	2,722.8	33.09821433	-103.57471089	38.20	-0.07	43.83	0.40
5216	2,723.3	33.09821082	-103.57471260	40.74	-0.15	43.71	0.35
5217	2,723.8	33.09820730	-103.57471382	39.22	-0.09	43.48	0.41
5218	2,724.4	33.09820376	-103.57471392	36.99	-0.08	42.58	0.41
5219	2,724.9	33.09820006	-103.57471457	37.73	-0.14	41.91	0.32
5220	2,725.4	33.09819613	-103.57471608	36.76	-0.11	41.84	0.34
5221	2,725.9	33.09819220	-103.57471761	36.29	-0.11	42.23	0.35
5222	2,726.5	33.09818823	-103.57471920	38.44	-0.16	41.68	0.24
5223	2,727.0	33.09818471	-103.57472084	26.09	0.01	40.04	0.33
5224	2,727.5	33.09818155	-103.57472254	34.22	-0.07	41.56	0.27
5225	2,728.0	33.09817981	-103.57472632	21.25	0.11	39.65	0.33
5226	2,728.5	33.09817884	-103.57473123	30.55	0.02	42.15	0.31
5227	2,729.1	33.09817973	-103.57473525	39.30	-0.08	45.20	0.28
5228	2,729.6	33.09818130	-103.57473895	29.84	0.05	44.57	0.29
5229	2,730.1	33.09818399	-103.57474133	35.43	-0.01	46.48	0.30
5230	2,730.6	33.09818694	-103.57474342	40.47	-0.08	48.59	0.36
5231	2,731.1	33.09819038	-103.57474457	42.93	-0.13	50.86	0.33
5232	2,731.7	33.09819386	-103.57474561	42.31	-0.09	51.45	0.34
5233	2,732.2	33.09819764	-103.57474702	42.19	-0.10	52.77	0.32
5234	2,732.7	33.09820142	-103.57474842	46.76	-0.14	54.65	0.30
5235	2,733.2	33.09820511	-103.57474948	49.69	-0.07	57.19	0.36
5236	2,733.8	33.09820887	-103.57475059	55.16	-0.13	58.40	0.33
5237	2,734.3	33.09821286	-103.57475193	64.65	-0.15	62.77	0.30
5238	2,734.8	33.09821671	-103.57475334	62.70	-0.06	65.27	0.38
5239	2,735.3	33.09822011	-103.57475501	67.11	-0.17	68.95	0.31
5240	2,735.9	33.09822300	-103.57475648	69.49	-0.13	74.02	0.33
5241	2,736.4	33.09822481	-103.57475754	65.66	-0.06	75.43	0.40
5242	2,736.9	33.09822669	-103.57475883	62.77	-0.07	73.40	0.35
5243	2,737.4	33.09822865	-103.57476045	62.70	-0.11	73.16	0.29
5244	2,737.9	33.09822980	-103.57476226	65.39	-0.08	78.32	0.38
5245	2,738.5	33.09823011	-103.57476427	66.76	-0.09	79.38	0.39
5246	2,739.0	33.09823029	-103.57476810	66.33	-0.12	77.46	0.28
5247	2,739.5	33.09823040	-103.57477324	70.66	-0.09	83.05	0.32
5248	2,740.0	33.09823069	-103.57477947	75.08	-0.09	88.48	0.35
5249	2,740.6	33.09823109	-103.57478625	78.24	-0.10	91.09	0.30
5250	2,741.1	33.09823178	-103.57479301	73.98	-0.06	88.98	0.33
5251	2,741.6	33.09823258	-103.57479976	68.79	-0.05	85.82	0.29
5252	2,742.1	33.09823317	-103.57480662	62.42	-0.02	83.87	0.30
5253	2,742.6	33.09823372	-103.57481351	54.34	0.03	77.19	0.28
5254	2,743.2	33.09823513	-103.57482033	52.89	0.02	76.13	0.29
5255	2,743.7	33.09823663	-103.57482714	59.65	-0.04	73.32	0.28
5256	2,744.2	33.09823836	-103.57483285	49.06	0.03	73.40	0.29
5257	2,744.7	33.09824019	-103.57483854	55.90	-0.06	74.81	0.25
5258	2,745.3	33.09824285	-103.57484385	53.09	-0.02	71.68	0.24
5259	2,745.8	33.09824543	-103.57484888	55.55	-0.05	71.02	0.27
5260	2,746.3	33.09824745	-103.57485234	58.13	-0.10	67.50	0.29
5261	2,746.8	33.09824907	-103.57485553	55.59	-0.04	65.94	0.37
5262	2,747.3	33.09824948	-103.57485783	54.49	-0.05	66.68	0.38
5263	2,747.9	33.09825028	-103.57486048	62.27	-0.14	67.77	0.27
5264	2,748.4	33.09825184	-103.57486384	70.55	-0.19	74.22	0.23
5265	2,748.9	33.09825303	-103.57486769	58.36	-0.10	67.34	0.34
5266	2,749.4	33.09825376	-103.57487222	61.17	-0.15	64.10	0.28
5267	2,750.0	33.09825398	-103.57487642	53.59	-0.02	62.03	0.28
5268	2,750.5	33.09825374	-103.57488035	55.51	-0.11	61.37	0.25
5269	2,751.0	33.09825353	-103.57488460	64.45	-0.18	65.94	0.21
5270	2,751.5	33.09825333	-103.57488904	60.63	-0.03	68.20	0.30

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5271	2,752.0	33.09825297	-103.57489350	58.87	-0.08	63.67	0.26
5272	2,752.6	33.09825253	-103.57489797	62.85	-0.09	58.87	0.30
5273	2,753.1	33.09825113	-103.57490270	66.52	-0.08	61.45	0.39
5274	2,753.6	33.09824945	-103.57490750	75.16	-0.20	69.14	0.24
5275	2,754.1	33.09824778	-103.57491239	68.32	-0.09	72.46	0.32
5276	2,754.7	33.09824612	-103.57491729	71.13	-0.12	77.27	0.31
5277	2,755.2	33.09824472	-103.57492253	78.79	-0.13	81.99	0.30
5278	2,755.7	33.09824334	-103.57492778	85.16	-0.09	83.56	0.33
5279	2,756.2	33.09824188	-103.57493292	95.94	-0.16	83.67	0.26
5280	2,756.7	33.09824039	-103.57493807	103.32	-0.09	86.52	0.28
5281	2,757.3	33.09823857	-103.57494340	113.59	-0.15	93.52	0.18
5282	2,757.8	33.09823655	-103.57494918	121.99	-0.12	101.37	0.21
5283	2,758.3	33.09823447	-103.57495477	124.88	-0.13	108.05	0.23
5284	2,758.8	33.09823235	-103.57496054	128.71	-0.15	112.11	0.23
5285	2,759.4	33.09823049	-103.57496593	122.34	-0.08	108.87	0.33
5286	2,759.9	33.09822849	-103.57497151	134.10	-0.14	101.68	0.36
5287	2,760.4	33.09822627	-103.57497745	139.45	-0.04	99.53	0.46
5288	2,760.9	33.09822401	-103.57498369	152.85	-0.14	108.16	0.38
5289	2,761.4	33.09822171	-103.57499032	148.63	-0.01	109.26	0.45
5290	2,762.0	33.09821948	-103.57499676	130.16	-0.09	102.46	0.35
5291	2,762.5	33.09821729	-103.57500309	102.97	-0.03	86.02	0.34
5292	2,763.0	33.09821533	-103.57500868	90.20	-0.06	75.00	0.30
5293	2,763.5	33.09821351	-103.57501379	83.16	-0.10	65.51	0.30
5294	2,764.1	33.09821148	-103.57501901	76.33	-0.08	60.04	0.35
5295	2,764.6	33.09820936	-103.57502427	78.09	-0.12	58.05	0.30
5296	2,765.1	33.09820705	-103.57502929	68.91	-0.05	54.57	0.39
5297	2,765.6	33.09820470	-103.57503422	74.84	-0.16	49.77	0.26
5298	2,766.1	33.09820233	-103.57503919	62.54	-0.04	38.28	0.34
5299	2,766.7	33.09819995	-103.57504417	60.00	-0.08	34.22	0.35
5300	2,767.2	33.09819711	-103.57504940	58.48	-0.06	40.39	0.35
5301	2,767.7	33.09819423	-103.57505464	50.27	-0.02	40.82	0.35
5302	2,768.2	33.09819102	-103.57505959	53.28	-0.10	41.41	0.30
5303	2,768.8	33.09818791	-103.57506441	47.50	-0.02	38.75	0.39
5304	2,769.3	33.09818542	-103.57506839	44.45	-0.03	38.01	0.37
5305	2,769.8	33.09818337	-103.57507192	39.02	0.08	37.93	0.40
5306	2,770.3	33.09818295	-103.57507377	42.19	0.05	36.52	0.39
5307	2,770.8	33.09818259	-103.57507611	45.35	0.05	36.64	0.39
5308	2,771.4	33.09818237	-103.57507950	45.27	-0.01	36.29	0.34
5309	2,771.9	33.09818172	-103.57508339	45.23	-0.04	34.92	0.35
5310	2,772.4	33.09818037	-103.57508806	42.93	-0.03	35.08	0.35
5311	2,772.9	33.09817841	-103.57509315	50.94	-0.08	33.36	0.30
5312	2,773.5	33.09817576	-103.57509870	46.33	0.00	31.72	0.37
5313	2,774.0	33.09817294	-103.57510415	48.98	-0.05	34.14	0.32
5314	2,774.5	33.09816997	-103.57510952	45.16	0.01	33.98	0.35
5315	2,775.0	33.09816702	-103.57511509	49.30	-0.06	35.35	0.29
5316	2,775.5	33.09816408	-103.57512077	47.77	-0.02	36.29	0.29
5317	2,776.1	33.09816098	-103.57512633	47.58	-0.04	35.78	0.30
5318	2,776.6	33.09815782	-103.57513187	52.50	-0.05	39.06	0.28
5319	2,777.1	33.09815451	-103.57513697	54.22	-0.03	39.06	0.31
5320	2,777.6	33.09815116	-103.57514196	63.16	-0.08	41.80	0.31
5321	2,778.1	33.09814838	-103.57514627	63.95	-0.04	42.89	0.40
5322	2,778.7	33.09814566	-103.57515052	68.52	-0.11	45.43	0.35
5323	2,779.2	33.09814338	-103.57515526	72.70	-0.05	50.12	0.38
5324	2,779.7	33.09814116	-103.57515999	76.64	-0.10	52.15	0.37
5325	2,780.2	33.09813925	-103.57516429	79.02	-0.10	53.95	0.39
5326	2,780.8	33.09813732	-103.57516859	79.45	-0.08	55.43	0.42
5327	2,781.3	33.09813521	-103.57517289	79.18	-0.14	55.70	0.32
5328	2,781.8	33.09813303	-103.57517716	75.43	-0.07	54.14	0.38
5329	2,782.3	33.09813061	-103.57518142	71.21	-0.10	54.14	0.36
5330	2,782.9	33.09812838	-103.57518586	71.91	-0.09	53.20	0.35
5331	2,783.4	33.09812657	-103.57519064	67.15	-0.04	48.67	0.38
5332	2,783.9	33.09812473	-103.57519548	63.83	-0.11	41.52	0.28

EM38 Survey Results, Foundation Energy Management
Chalupa #4 SWD Wellhead Release, Lea County, New Mexico

Reading	Time (Sec)	Latitude	Longitude	Cond 0.5m/VD	Inphase 0.5m/VD	Cond 1m/VD	Inphase 1m/VD
5333	2,784.4	33.09812284	-103.57520039	53.48	-0.01	34.61	0.33
5334	2,784.9	33.09812174	-103.57520417	49.73	-0.04	33.36	0.29
5335	2,785.5	33.09812144	-103.57520678	48.20	-0.02	31.33	0.30
5336	2,786.0	33.09812070	-103.57520864	48.63	0.00	30.98	0.30
5337	2,786.5	33.09811964	-103.57520997	49.18	-0.04	33.20	0.27
5338	2,787.0	33.09811920	-103.57521223	50.23	-0.09	32.62	0.24
5339	2,787.6	33.09811908	-103.57521495	50.98	-0.10	31.72	0.20
5340	2,788.1	33.09811775	-103.57521777	44.22	-0.05	30.90	0.26
5341	2,788.6	33.09811601	-103.57522059	44.61	-0.09	31.29	0.23
5342	2,789.1	33.09811316	-103.57522392	45.47	-0.06	32.89	0.25
5343	2,789.6	33.09811010	-103.57522733	48.95	-0.03	42.11	0.30
5344	2,790.2	33.09810634	-103.57523175	52.34	-0.12	41.60	0.20
5345	2,790.7	33.09810254	-103.57523626	45.74	-0.06	32.42	0.24
5346	2,791.2	33.09809925	-103.57524149	41.95	-0.09	30.35	0.24
5347	2,791.7	33.09809602	-103.57524679	37.66	-0.06	27.66	0.24
5348	2,792.3	33.09809346	-103.57525292	40.20	-0.07	33.44	0.24
5349	2,792.8	33.09809094	-103.57525916	42.11	-0.09	33.79	0.19
5350	2,793.3	33.09808887	-103.57526521	45.47	-0.02	36.37	0.25
5351	2,793.8	33.09808702	-103.57527140	52.85	-0.08	43.20	0.21
5352	2,794.3	33.09808588	-103.57527772	45.20	-0.01	34.73	0.29
5353	2,794.9	33.09808490	-103.57528343	46.84	-0.12	29.10	0.20
5354	2,795.4	33.09808421	-103.57528802	42.07	0.01	32.34	0.26
5355	2,795.9	33.09808399	-103.57529148	44.84	-0.04	40.27	0.28
5356	2,796.4	33.09808439	-103.57529342	37.89	0.06	45.98	0.26
5357	2,797.0	33.09808466	-103.57529440	40.59	0.03	44.61	0.26
5358	2,797.5	33.09808481	-103.57529448	40.94	0.00	43.79	0.25
5359	2,798.0	33.09808482	-103.57529438	40.43	0.00	45.35	0.25
5360	2,798.5	33.09808473	-103.57529414	40.55	-0.02	40.74	0.27

APPENDIX C

BORING RECORDS

BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	CLAYEY SILT: DARK BROWN, 7.5YR 3/2, 70% SILT, 30% CLAY, SLIGHTLY MOIST, NO ODOR	SC			–		55.0		
	3.0	CONSOLIDATED LIMEY CALICHE: VERY HARD, MULTI-COLORED								
	9.0	SANDY SILT: PINK, 5YR 7/3, 80% SILT 20% VERY FINE SAND, DRY, NO ODOR	SC							
	14.0	SANDY SILT: LIGHT REDDISH BROWN, 5YR 6/4, 80% SILT, 20% SAND	SC				–			
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***BH-03***

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DRAWN BY: S.GRAUE PAGE 1 OF 2

BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	35	SANDY SILT: LIGHT REDDISH BROWN, 5YR 6/4, 80% SILT, 20% SAND (CONTINUED)	SC							
	40									
	45									
	50									
	55	TOTAL DEPTH: 55.0 FEET							55.0	
	60									
	65									
	70									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***BH-03***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–		75.0		
	2.5	CALICHE: PINK WHITE, 7.5YR 8/2, HARD, DRY								
	5									
	10									
	15	SILTY SAND: PINK, 7.5YR 7/3, 30% SILT, 70% SAND, SOFT, SLIGHTLY MOIST	SC							
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***BH-04***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	35	SILTY SAND: PINK, 7.5YR 7/3, 30% SILT, 70% SAND, SOFT, SLIGHTLY MOIST (CONTINUED)	SC				-			
	40									
	45									
	50									
	55									
	60									
	65									
	70									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***BH–04***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	70	SILTY SAND: PINK, 7.5YR 7/3, 30% SILT, 70% SAND, SOFT, SLIGHTLY MOIST (CONTINUED)	SC							
	75	TOTAL DEPTH: 75.0 FEET							75.0	
	80									
	85									
	90									
	95									
	100									
	105									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***BH–04***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0		
	1.0	CALICHE: WHITE AND PINK, 7.5YR 8/2, HARD, DRY								
	5									
	6.0	TOTAL DEPTH: 6.0 FEET							6.0	
	10									
	15									
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***HA–9***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0		
	1.0	CALICHE: WHITE AND PINK, 7.5YR 8/2, HARD, DRY								
	5									
	6.0	TOTAL DEPTH: 6.0 FEET							6.0	
	10									
	15									
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***HA–10***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0		
	1.0	CALICHE: WHITE AND PINK, 7.5YR 8/2, HARD, DRY								
	5									
	6.0	TOTAL DEPTH: 6.0 FEET							6.0	
	10									
	15									
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***HA–11***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0		
	2.5	CALICHE: PINK WHITE, 7.5YR 8/2 HARD, DRY								
	5								6.0	
	6.0	TOTAL DEPTH: 6.0 FEET								
	10									
	15									
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***HA–12***

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0	6.0	
	2.5	CALICHE: PINK WHITE, 7.5YR 8/2 HARD, DRY								
	6.0	TOTAL DEPTH: 6.0 FEET								

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER **FEMHCHAPS1**

BORING NUMBER **HA–13**

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PAGE 1 OF 1

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BORING RECORD

GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	OVM SOIL GAS PPM X 1.0 (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE OVM READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
		Start: Stop: GROUND SURFACE:								BACKGROUND OVM READING: SOIL: _____ PPM AIR: _____ PPM
	0	SILT: DARK BROWN, 7.5YR 3/2, 100% SILT, SLIGHTLY MOIST, NO ODOR	SC			–	–	6.0		
	2.5	CALICHE: PINK WHITE, 7.5YR 8/2 HARD, DRY								
	5								6.0	
	6.0	TOTAL DEPTH: 6.0 FEET								
	10									
	15									
	20									
	25									
	30									
	35									

CME CONTINUOUS AUGER SAMPLER

WATER TABLE (TIME OF BORING)

WATER TABLE (24 HOURS)

NR: NO RECOVERY

FEM – CHALUPA WELL HEAD

JOB NAME/NUMBER ***FEMHCHAPS1***

BORING NUMBER ***HA–14***

ENVIRO CLEAN CARDINAL

7060 S. Yale Ave., Suite 603 ▪ Tulsa, Oklahoma 74136 ▪ 918-794-7828

www.EnviroCleanPS.com

DATE DRILLED 11/1/2017

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CHECKED BY M.MUGAVERO DRAWING NO. HA–14_BORE

DRAWN BY: S.GRAUE PAGE 1 OF 1

APPENDIX D

LABORATORY REPORT AND CHAIN-OF-CUSTODY

Analytical Report 567388

for

Enviroclean- Midland

Project Manager: Julie Czech

FEM Chalupa #4 SWD-Well Head

FEMHCHAPS1

09-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

09-NOV-17

Project Manager: **Julie Czech**
Enviroclean- Midland
2405 ECR 123
Midland, TX 79706

Reference: XENCO Report No(s): **567388**
FEM Chalupa #4 SWD-Well Head
Project Address: TX

Julie Czech:

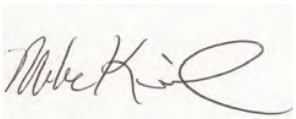
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 567388. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 567388 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Mike Kimmel
Client Services Manager

Sample Cross Reference 567388

Enviroclean- Midland, Midland, TX

FEM Chalupa #4 SWD-Well Head

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH-3	S	11-01-17 13:50	0 - 1 ft	567388-001
BH-3	S	11-01-17 13:50	1 - 2 ft	567388-002
BH-3	S	11-01-17 13:50	2 - 3 ft	567388-003
BH-3	S	11-01-17 13:50	3 - 4 ft	567388-004
BH-3	S	11-01-17 13:50	4 - 5 ft	567388-005
BH-3	S	11-01-17 13:50	5 - 6 ft	567388-006
BH-3	S	11-01-17 13:50	9 - 10 ft	567388-007
BH-3	S	11-01-17 13:50	14 - 15 ft	567388-008
BH-3	S	11-01-17 13:50	19 - 20 ft	567388-009
BH-3	S	11-01-17 13:50	24 - 25 ft	567388-010
BH-3	S	11-01-17 13:50	29 - 30 ft	567388-011
BH-3	S	11-01-17 13:50	34 - 35 ft	567388-012
BH-3	S	11-01-17 13:50	39 - 40 ft	567388-013
BH-3	S	11-01-17 13:50	44 - 45 ft	567388-014
BH-3	S	11-01-17 13:50	49 - 50 ft	567388-015
BH-3	S	11-01-17 13:50	54 - 55 ft	567388-016
HA-9	S	11-01-17 15:40	0 - 1 ft	567388-017
HA-9	S	11-01-17 15:40	1 - 2 ft	567388-018
HA-9	S	11-01-17 15:40	2 - 3 ft	567388-019
HA-9	S	11-01-17 15:40	3 - 4 ft	567388-020
HA-9	S	11-01-17 15:40	4 - 5 ft	567388-021
HA-9	S	11-01-17 15:40	5 - 6 ft	567388-022
HA-10	S	11-01-17 15:35	0 - 1 ft	567388-023
HA-10	S	11-01-17 15:35	1 - 2 ft	567388-024
HA-10	S	11-01-17 15:35	2 - 3 ft	567388-025
HA-10	S	11-01-17 15:35	3 - 4 ft	567388-026
HA-10	S	11-01-17 15:35	4 - 5 ft	567388-027
HA-10	S	11-01-17 15:35	5 - 6 ft	567388-028
HA-11	S	11-01-17 15:15	0 - 1 ft	567388-029
HA-11	S	11-01-17 15:15	1 - 2 ft	567388-030
HA-11	S	11-01-17 15:15	2 - 3 ft	567388-031
HA-11	S	11-01-17 15:15	3 - 4 ft	567388-032
HA-11	S	11-01-17 15:15	4 - 5 ft	567388-033
HA-11	S	11-01-17 15:15	5 - 6 ft	567388-034
BH-4	S	11-01-17 15:50	0 - 1 ft	567388-035
BH-4	S	11-01-17 15:50	1 - 2 ft	567388-036
BH-4	S	11-01-17 15:50	2 - 3 ft	567388-037
BH-4	S	11-01-17 15:50	3 - 4 ft	567388-038
BH-4	S	11-01-17 15:50	4 - 5 ft	567388-039
BH-4	S	11-01-17 15:50	5 - 6 ft	567388-040
BH-4	S	11-01-17 15:50	9 - 10 ft	567388-041
BH-4	S	11-01-17 15:50	14 - 15 ft	567388-042
BH-4	S	11-01-17 15:50	19 - 20 ft	567388-043

BH-4	S	11-01-17 15:50	24 - 25 ft	567388-044
BH-4	S	11-01-17 15:50	29 - 30 ft	567388-045
BH-4	S	11-01-17 15:50	34 - 35 ft	567388-046
BH-4	S	11-01-17 15:50	39 - 40 ft	567388-047
BH-4	S	11-01-17 15:50	44 - 45 ft	567388-048
BH-4	S	11-01-17 15:50	49 - 50 ft	567388-049
BH-4	S	11-01-17 15:50	54 - 55 ft	567388-050
BH-4	S	11-01-17 15:50	59 - 60 ft	567388-051
BH-4	S	11-01-17 15:50	64 - 65 ft	567388-052
BH-4	S	11-01-17 15:50	69 - 70 ft	567388-053
BH-4	S	11-01-17 15:50	74 - 75 ft	567388-054
HA-12	S	11-01-17 17:20	0 - 1 ft	567388-055
HA-12	S	11-01-17 17:20	1 - 2 ft	567388-056
HA-12	S	11-01-17 17:20	2 - 3 ft	567388-057
HA-12	S	11-01-17 17:20	3 - 4 ft	567388-058
HA-12	S	11-01-17 17:20	4 - 5 ft	567388-059
HA-12	S	11-01-17 17:20	5 - 6 ft	567388-060
HA-13	S	11-01-17 17:10	0 - 1 ft	567388-061
HA-13	S	11-01-17 17:10	1 - 2 ft	567388-062
HA-13	S	11-01-17 17:10	2 - 3 ft	567388-063
HA-13	S	11-01-17 17:10	3 - 4 ft	567388-064
HA-13	S	11-01-17 17:10	4 - 5 ft	567388-065
HA-13	S	11-01-17 17:10	5 - 6 ft	567388-066
HA-14	S	11-01-17 17:05	0 - 1 ft	567388-067
HA-14	S	11-01-17 17:05	1 - 2 ft	567388-068
HA-14	S	11-01-17 17:05	2 - 3 ft	567388-069
HA-14	S	11-01-17 17:05	3 - 4 ft	567388-070
HA-14	S	11-01-17 17:05	4 - 5 ft	567388-071
HA-14	S	11-01-17 17:05	5 - 6 ft	567388-072

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032472 Inorganic Anions by EPA 300
Lab Sample ID 567388-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 567388-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3032474 Inorganic Anions by EPA 300
Lab Sample ID 567388-030 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 567388-020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-001		567388-002		567388-003		567388-004		567388-005		567388-006	
	Field Id:	BH-3		BH-3		BH-3		BH-3		BH-3		BH-3	
	Depth:	0-1 ft		1-2 ft		2-3 ft		3-4 ft		4-5 ft		5-6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11	
	Analyzed:	Nov-04-17 16:13		Nov-04-17 16:22		Nov-04-17 16:32		Nov-04-17 17:00		Nov-04-17 17:28		Nov-04-17 17:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		121	9.94	2330	9.77	3710 D	92.9	644	9.77	1020	9.29	1340	9.29

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-007		567388-008		567388-009		567388-010		567388-011		567388-012	
	Field Id:	BH-3		BH-3		BH-3		BH-3		BH-3		BH-3	
	Depth:	9-10 ft		14-15 ft		19-20 ft		24-25 ft		29-30 ft		34-35 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11	
	Analyzed:	Nov-04-17 17:46		Nov-04-17 17:56		Nov-04-17 18:05		Nov-04-17 18:14		Nov-04-17 18:24		Nov-04-17 18:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1740	9.33	201 D	90.7	1210	9.82	1370	9.26	938	9.86	123	9.52

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-013		567388-014		567388-015		567388-016		567388-017		567388-018	
	Field Id:	BH-3		BH-3		BH-3		BH-3		HA-9		HA-9	
	Depth:	39-40 ft		44-45 ft		49-50 ft		54-55 ft		0-1 ft		1-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 13:50		Nov-01-17 15:40		Nov-01-17 15:40	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11		Nov-04-17 12:11	
	Analyzed:	Nov-04-17 19:20		Nov-04-17 19:29		Nov-04-17 19:39		Nov-04-17 19:48		Nov-04-17 19:57		Nov-04-17 20:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		158	9.33	16.6	9.62	31.7	9.63	43.9	9.54	596	9.77	626	9.24

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-019		567388-020		567388-021		567388-022		567388-023		567388-024	
	Field Id:	HA-9		HA-9		HA-9		HA-9		HA-10		HA-10	
	Depth:	2-3 ft		3-4 ft		4-5 ft		5-6 ft		0-1 ft		1-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:40		Nov-01-17 15:40		Nov-01-17 15:40		Nov-01-17 15:40		Nov-01-17 15:35		Nov-01-17 15:35	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:11		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20	
	Analyzed:	Nov-04-17 20:16		Nov-04-17 21:12		Nov-04-17 21:40		Nov-04-17 21:50		Nov-04-17 21:59		Nov-04-17 22:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		383	9.67	129	9.09	118	9.58	101	9.65	1950	9.12	775	9.52

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-025		567388-026		567388-027		567388-028		567388-029		567388-030	
	Field Id:	HA-10		HA-10		HA-10		HA-10		HA-11		HA-11	
	Depth:	2-3 ft		3-4 ft		4-5 ft		5-6 ft		0-1 ft		1-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:35		Nov-01-17 15:35		Nov-01-17 15:35		Nov-01-17 15:35		Nov-01-17 15:15		Nov-01-17 15:15	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20	
	Analyzed:	Nov-04-17 22:36		Nov-04-17 22:46		Nov-04-17 22:55		Nov-04-17 23:04		Nov-04-17 23:14		Nov-04-17 23:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2380	9.63	1580	9.47	2650 D	100	2820 D	100	263	9.98	1510	9.45

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-031		567388-032		567388-033		567388-034		567388-035		567388-036	
	Field Id:	HA-11		HA-11		HA-11		HA-11		BH-4		BH-4	
	Depth:	2-3 ft		3-4 ft		4-5 ft		5-6 ft		0-1 ft		1-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:15		Nov-01-17 15:15		Nov-01-17 15:15		Nov-01-17 15:15		Nov-01-17 15:50		Nov-01-17 15:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20	
	Analyzed:	Nov-04-17 23:51		Nov-05-17 00:01		Nov-05-17 00:29		Nov-05-17 00:38		Nov-05-17 00:47		Nov-05-17 00:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1960	9.67	1130	9.60	1070	9.80	1740	9.38	4610 D	100	3170 D	100

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-037		567388-038		567388-039		567388-040		567388-041		567388-042	
	Field Id:	BH-4		BH-4		BH-4		BH-4		BH-4		BH-4	
	Depth:	2-3 ft		3-4 ft		4-5 ft		5-6 ft		9-10 ft		14-15 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:20		Nov-04-17 12:25		Nov-04-17 12:25	
	Analyzed:	Nov-05-17 01:06		Nov-05-17 01:15		Nov-05-17 01:25		Nov-05-17 01:34		Nov-05-17 02:49		Nov-05-17 03:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1810	9.28	714	9.28	1390	9.24	1020	9.98	1630	97.8	2150	97.7

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-043		567388-044		567388-045		567388-046		567388-047		567388-048	
	Field Id:	BH-4		BH-4		BH-4		BH-4		BH-4		BH-4	
	Depth:	19-20 ft		24-25 ft		29-30 ft		34-35 ft		39-40 ft		44-45 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25	
	Analyzed:	Nov-05-17 03:18		Nov-05-17 03:26		Nov-05-17 03:33		Nov-05-17 03:55		Nov-05-17 04:02		Nov-05-17 04:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2080	97.5	1060	97.3	1710	95.8	714	9.24	1780	90.1	1400	92.8

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-049		567388-050		567388-051		567388-052		567388-053		567388-054	
	Field Id:	BH-4		BH-4		BH-4		BH-4		BH-4		BH-4	
	Depth:	49-50 ft		54-55 ft		59-60 ft		64-65 ft		69-70 ft		74-75 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50		Nov-01-17 15:50	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25	
	Analyzed:	Nov-05-17 04:16		Nov-05-17 04:24		Nov-05-17 04:31		Nov-05-17 04:53		Nov-05-17 05:00		Nov-05-17 05:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3440	97.8	1020	9.84	256	9.78	179	9.75	106	9.73	110	9.71

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-055		567388-056		567388-057		567388-058		567388-059		567388-060	
	Field Id:	HA-12		HA-12		HA-12		HA-12		HA-12		HA-12	
	Depth:	0-1 ft		1-2 ft		2-3 ft		3-4 ft		4-5 ft		5-6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 17:20		Nov-01-17 17:20		Nov-01-17 17:20		Nov-01-17 17:20		Nov-01-17 17:20		Nov-01-17 17:20	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25		Nov-04-17 12:25	
	Analyzed:	Nov-05-17 05:29		Nov-05-17 05:36		Nov-05-17 05:43		Nov-05-17 05:51		Nov-05-17 05:58		Nov-05-17 06:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1610	101	1560	96.7	377	9.60	2150	9.45	379	94.2	273	9.36

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-061		567388-062		567388-063		567388-064		567388-065		567388-066	
	Field Id:	HA-13		HA-13		HA-13		HA-13		HA-13		HA-13	
	Depth:	0-1 ft		1-2 ft		2-3 ft		3-4 ft		4-5 ft		5-6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 17:10		Nov-01-17 17:10		Nov-01-17 17:10		Nov-01-17 17:10		Nov-01-17 17:10		Nov-01-17 17:10	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32	
	Analyzed:	Nov-05-17 06:49		Nov-05-17 07:10		Nov-05-17 07:18		Nov-05-17 07:25		Nov-05-17 07:32		Nov-05-17 07:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		234	9.71	2680	94.3	185	9.58	1310	97.7	373	9.78	1330	97.5

Mike Kimmel
Client Services Manager

Certificate of Analysis Summary 567388

Enviroclean- Midland, Midland, TX

Project Name: FEM Chalupa #4 SWD-Well Head

Project Id: FEMHCHAPS1
Contact: Julie Czech
Project Location: TX

Date Received in Lab: Thu Nov-02-17 04:21 pm
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	567388-067		567388-068		567388-069		567388-070		567388-071		567388-072	
	Field Id:	HA-14		HA-14		HA-14		HA-14		HA-14		HA-14	
	Depth:	0-1 ft		1-2 ft		2-3 ft		3-4 ft		4-5 ft		5-6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-01-17 17:05		Nov-01-17 17:05		Nov-01-17 17:05		Nov-01-17 17:05		Nov-01-17 17:05		Nov-01-17 17:05	
Inorganic Anions by EPA 300 **SUB: TX104704215-17-23**	***Extracted:***	Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32		Nov-04-17 12:32	
	Analyzed:	Nov-05-17 08:01		Nov-05-17 08:08		Nov-05-17 08:15		Nov-05-17 08:23		Nov-05-17 08:30		Nov-05-17 08:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3270	97.8	2850	98.2	2100	96.0	2140	94.0	4210	97.8	2770	104

Mike Kimmel
Client Services Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

BS / BSD Recoveries

Project Name: FEM Chalupa #4 SWD-Well Head

Work Order #: 567388 **Project ID:** FEMHCHAPS1

Analyst: MAB **Date Prepared:** 11/04/2017 **Date Analyzed:** 11/04/2017

Lab Batch ID: 3032472 **Sample:** 7633859-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	100	97.9	98	100	98.2	98	0	80-120	20	

Analyst: MAB **Date Prepared:** 11/04/2017 **Date Analyzed:** 11/04/2017

Lab Batch ID: 3032474 **Sample:** 7633860-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	100	101	101	100	100	100	1	80-120	20	

Analyst: MAB **Date Prepared:** 11/04/2017 **Date Analyzed:** 11/05/2017

Lab Batch ID: 3032477 **Sample:** 7633863-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	100	93.3	93	100	90.7	91	3	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: FEM Chalupa #4 SWD-Well Head

Work Order #: 567388 **Project ID:** FEMHCHAPS1

Analyst: MAB **Date Prepared:** 11/04/2017 **Date Analyzed:** 11/05/2017

Lab Batch ID: 3032484 **Sample:** 7633865-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	100	91.5	92	100	96.4	96	5	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: FEM Chalupa #4 SWD-Well Head

Work Order # : 567388 **Project ID:** FEMHCHAPS1

Lab Batch ID: 3032472 **QC- Sample ID:** 567388-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/04/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	3280	96.3	3320	42	96.3	3330	52	0	80-120	20	X

Lab Batch ID: 3032472 **QC- Sample ID:** 567388-012 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/04/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	123	191	308	97	191	303	94	2	80-120	20	

Lab Batch ID: 3032474 **QC- Sample ID:** 567388-020 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/04/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	129	178	302	97	178	296	94	2	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: FEM Chalupa #4 SWD-Well Head

Work Order # : 567388 **Project ID:** FEMHCHAPS1

Lab Batch ID: 3032474 **QC- Sample ID:** 567388-030 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/04/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	1510	193	1670	83	189	1630	63	2	80-120	20	X

Lab Batch ID: 3032477 **QC- Sample ID:** 567388-041 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	2050	199	2220	85	199	2230	90	0	80-120	20	

Lab Batch ID: 3032477 **QC- Sample ID:** 567388-051 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	256	195	478	114	195	473	111	1	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: FEM Chalupa #4 SWD-Well Head

Work Order # : 567388 **Project ID:** FEMHCHAPS1

Lab Batch ID: 3032484 **QC- Sample ID:** 567388-061 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	234	189	426	102	189	437	107	3	80-120	20	

Lab Batch ID: 3032484 **QC- Sample ID:** 567389-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2017 **Date Prepared:** 11/04/2017 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	42.5	190	229	98	188	233	101	2	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

CHAIN OF CUSTODY RECORD

5067388 No. 03361

ENVIRO CLEAN SERVICES, LLC
(918) 794-7828

PROJECT NUMBER: FEMHCHAPS1	PROJECT NAME: FEM CHALUPA #4 SWD-WELL HEAD
SHIPPED TO: XENCO	PROJECT MANAGER: MATT MUGAVERO
COC 1 of 5	TAT: STANDARD

SAMPLER'S PRINTED NAME: GEORGE RICHARDSON

SAMPLER'S SIGNATURE:

Date	Time	Sample ID	Sample Matrix	# of Sample Containers	CHLORIDE-300	REMARKS
11/1/17	1350	BH-3 (0-1 ft)	SOIL	1	X	
		BH-3 (1-2 ft)			X	
		BH-3 (2-3 ft)			X	
		BH-3 (3-4 ft)			X	
		BH-3 (4-5 ft)			X	
		BH-3 (5-6 ft)			X	
		BH-3 (9-10 ft)			X	
		BH-3 (14-15 ft)			X	
		BH-3 (19-20 ft)			X	
		BH-3 (24-25 ft)			X	
		BH-3 (29-30 ft)			X	
		BH-3 (34-35 ft)			X	
		BH-3 (39-40 ft)			X	
		BH-3 (44-45 ft)			X	
		BH-3 (49-50 ft)			X	

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY:	DATE 11/2/17 TIME 1621	RECEIVED BY: Maurice Smith	DATE 11-2-17 TIME 16:21
RELINQUISHED BY:	DATE TIME	RECEIVED BY:	DATE TIME

METHOD OF SHIPMENT: HAND DELIVERED

AIRBILL NUMBER:

RECEIVED IN LABORATORY BY: DATE TIME

Send PDF, EDD, and INVOICE (if applicable) to:
JULIE CZECH at julie.czech@eccgrp.com

LABORATORY CONTACT: KELSEY BROOKS

LABORATORY ADDRESS: 1211 W. FLORIDA AVE MIDLAND, TX 79701

POINT OF ORIGIN: ☐ OKLAHOMA CITY ☒ TULSA ☐ NORMAN ☐ WOODWARD ☐ ARLINGTON ☐ MIDLAND ☐ OTHER:

PAGE #1 - RECEIVING LAB PAGE #2 - ENVIRO CLEAN PROJECT FILE PAGE #3 - ENVIRO CLEAN QA/QC DEPT

CHAIN OF CUSTODY RECORD 567388 No. 03357

ENVIRO CLEAN SERVICES, LLC
(918) 794-7828

PROJECT NUMBER: FEMHCHAPS1
PROJECT NAME: FEM CHALUPA #4SWD - WELLHEAD
COC 2 of 5
SHIPPED TO: XENCO
PROJECT MANAGER: MATT MUGAVERO
TAT: STANDARD

SAMPLER'S PRINTED NAME: GEORGE RICHARDSON
SAMPLER'S SIGNATURE:

Date	Time	Sample ID	Sample Matrix	# of Sample Containers	CHLORIDE - 300	REMARKS
11/1/17	1350	BA-3 (54-55 ft)	SOIL	1	X	
	1540	HA-9 (0-1 ft)			X	
		HA-9 (1-2 ft)			X	
		HA-9 (2-3 ft)			X	
		HA-9 (3-4 ft)			X	
		HA-9 (4-5 ft)			X	
		HA-9 (5-6 ft)			X	
	1535	HA-10 (0-1 ft)			X	
		HA-10 (1-2 ft)			X	
		HA-10 (2-3 ft)			X	
		HA-10 (3-4 ft)			X	
		HA-10 (4-5 ft)			X	
		HA-10 (5-6 ft)			X	
	1515	HA-11 (0-1 ft)			X	
		HA-11 (1-2 ft)			X	

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY: DATE 11/2/17 TIME 1621
RECEIVED BY: DATE 11.02.17 TIME 16:21

RELINQUISHED BY: DATE TIME
RECEIVED BY: DATE TIME

METHOD OF SHIPMENT: HAND DELIVERED
AIRBILL NUMBER:

RECEIVED IN LABORATORY BY: DATE TIME

Send PDF, EDD, and INVOICE (if applicable) to:
JULIE CZECH at julie.czech@eccgrp.com

LABORATORY CONTACT: KELSEY BROOKS

LABORATORY ADDRESS: 1211 W. FLORIDA AVE. MIDLAND, TX 79701

POINT OF ORIGIN: ☐ OKLAHOMA CITY ☒ TULSA ☐ NORMAN ☐ WOODWARD ☐ ARLINGTON ☐ MIDLAND ☐ OTHER:

PAGE #1 - RECEIVING LAB
PAGE #2 - ENVIRO CLEAN PROJECT FILE
PAGE #3 - ENVIRO CLEAN QA/QC DEPT

CHAIN OF CUSTODY RECORD 567388 No. 03358

ENVIRO CLEAN SERVICES, LLC
(918) 794-7828

PROJECT NUMBER: FEMHCHAPS1
PROJECT NAME: FEM CHALUPA #4SWD-WELLHEAD
COC 3 of 5
SHIPPED TO: XENCO
PROJECT MANAGER: MATT MUGAVERO
TAT: STANDARD

SAMPLER'S PRINTED NAME: GEORGE RICHARDSON
SAMPLER'S SIGNATURE:

Date	Time	Sample ID	Sample Matrix	# of Sample Containers	CHLORIDE-300	REMARKS
11/1/17	1515	HA-11 (2-3 ft)	SOIL	1	X	
		HA-11 (3-4 ft)			X	
		HA-11 (4-5 ft)			X	
		HA-11 (5-6 ft)			X	
	1550	BH-4 (0-1 ft)			X	
		BH-4 (1-2 ft)			X	
		BH-4 (2-3 ft)			X	
		BH-4 (3-4 ft)			X	
		BH-4 (4-5 ft)			X	
		BH-4 (5-6 ft)			X	
		BH-4 (9-10 ft)			X	
		BH-4 (14-15 ft)			X	
		BH-4 (19-20 ft)			X	
		BH-4 (24-25 ft)			X	
		BH-4 (29-30 ft)			X	

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY: DATE 11/2/17 TIME 1621
RECEIVED BY: DATE 11.02.17 TIME 16:21

RELINQUISHED BY: DATE TIME
RECEIVED BY: DATE TIME

METHOD OF SHIPMENT: HAND DELIVERED
AIRBILL NUMBER:

RECEIVED IN LABORATORY BY: DATE TIME
Send PDF, EDD, and INVOICE (if applicable) to: JULIE CZECH at julie.czech@eccgrp.com

LABORATORY CONTACT: KELSEY BROOKS
LABORATORY ADDRESS: 1211 W. FLORIDA AVE MIDLAND, TX 79701

POINT OF ORIGIN: ☐ OKLAHOMA CITY ☒ TULSA ☐ NORMAN ☐ WOODWARD ☐ ARLINGTON ☐ MIDLAND ☐ OTHER:

PAGE #1 - RECEIVING LAB PAGE #2 - ENVIRO CLEAN PROJECT FILE PAGE #3 - ENVIRO CLEAN QA/QC DEPT

CHAIN OF CUSTODY RECORD 5673890 No. 03394

ENVIRO CLEAN SERVICES, LLC
(918) 794-7828

PROJECT NUMBER: FEMHCHAPS1
PROJECT NAME: FEM CHALUPA #4 SWD - WELLHEAD
COC 4 of 5
SHIPPED TO: XENCO
PROJECT MANAGER: MATT MUGAVERO
TAT: STANDARD

SAMPLER'S PRINTED NAME: GEORGE RICHARDSON
SAMPLER'S SIGNATURE:

Date	Time	Sample ID	Sample Matrix	# of Sample Containers	CHLORIDE - 300	REMARKS
11/1/17	1550	BH-4 (34-35 ft)	SOIL	1	X	
		BH-4 (39-40 ft)			X	
		BH-4 (44-45 ft)			X	
		BH-4 (49-50 ft)			X	
		BH-4 (54-55 ft)			X	
		BH-4 (59-60 ft)			X	
		BH-4 (64-65 ft)			X	
		BH-4 (69-70 ft)			X	
	↓	BH-4 (74-75 ft)			X	
	1720	HA-12 (0-1 ft)			X	
		HA-12 (1-2 ft)			X	
		HA-12 (2-3 ft)			X	
		HA-12 (3-4 ft)			X	
		HA-12 (4-5 ft)			X	
↓	↓	HA-12 (5-6 ft)	↓	↓	X	

Temp: 1.4 IR ID: R-8
CF: (0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

TOTAL NUMBER OF CONTAINERS: 15

RELINQUISHED BY:	DATE 11/2/17	RECEIVED BY:	DATE 11.02.17
	TIME 1621		TIME 16:21
RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
	TIME		TIME

METHOD OF SHIPMENT: HAND DELIVERED
AIRBILL NUMBER:
RECEIVED IN LABORATORY BY: DATE / TIME
Send PDF, EDD, and INVOICE (if applicable) to: JULIE CZECH at julie.czech@eccgrp.com
LABORATORY CONTACT: Kelsey Brooks
LABORATORY ADDRESS: 1211 W. Florida Ave. Midland, TX 79701

POINT OF ORIGIN: ☐ OKLAHOMA CITY ☒ TULSA ☐ NORMAN ☐ WOODWARD ☐ ARLINGTON ☐ MIDLAND ☐ OTHER:

PAGE #1 - RECEIVING LAB | PAGE #2 - ENVIRO CLEAN PROJECT FILE | PAGE #3 - ENVIRO CLEAN QA/QC DEPT

CHAIN OF CUSTODY RECORD 567388 No. 03388

ENVIRO CLEAN SERVICES, LLC
(918) 794-7828

PROJECT NUMBER: FEMH CHAPS1
PROJECT NAME: FEM CHALUPA #4 SWD - WELLHEAD
COC 5 of 5
SHIPPED TO: XENCO
PROJECT MANAGER: MATT MUGAVERO
TAT: STANDARD

SAMPLER'S PRINTED NAME: GEORGE RICHARDSON
SAMPLER'S SIGNATURE:

Date	Time	Sample ID	Sample Matrix	# of Sample Containers	CHLORIDE-300	REMARKS
11/1/17	1710	HA-13 (0-1 ft)	SOIL	1	X	
		HA-13 (1-2 ft)			X	
		HA-13 (2-3 ft)			X	
		HA-13 (3-4 ft)			X	
		HA-13 (4-5 ft)			X	
		HA-13 (5-6 ft)			X	
11/1/17	1705	HA-14 (0-1 ft)			X	
		HA-14 (1-2 ft)			X	
		HA-14 (2-3 ft)			X	
		HA-14 (3-4 ft)			X	
		HA-14 (4-5 ft)			X	
		HA-14 (5-6 ft)			X	

Temp: 1.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.2

TOTAL NUMBER OF CONTAINERS → 12

RELINQUISHED BY: DATE 11/2/17 TIME 1621
RECEIVED BY: DATE 11.02.17 TIME 16:21

RELINQUISHED BY: DATE TIME
RECEIVED BY: DATE TIME

METHOD OF SHIPMENT: HAND DELIVERED
AIRBILL NUMBER:

RECEIVED IN LABORATORY BY: DATE TIME
Send PDF, EDD, and INVOICE (if applicable) to: JULIE CZECH at julie.czech@eccgrp.com

LABORATORY CONTACT: KELSEY BROOKS
LABORATORY ADDRESS: 1211 W. FLORIDA AVE. MIDLAND, TX 79701

POINT OF ORIGIN: ☐ OKLAHOMA CITY ☐ TULSA ☐ NORMAN ☐ WOODWARD ☐ ARLINGTON ☐ MIDLAND ☐ OTHER:

PAGE #1 - RECEIVING LAB PAGE #2 - ENVIRO CLEAN PROJECT FILE PAGE #3 - ENVIRO CLEAN QA/QC DEPT

Inter-Office Shipment

IOS Number **1051320**

Date/Time: 11/03/17 10:48
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Jessica Kramer
Delivery Priority:
Air Bill No.: 770668844250

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
567388-001	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-002	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-003	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-004	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-005	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-006	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-007	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-008	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-009	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-010	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-011	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-012	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-013	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-014	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-015	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-016	S	BH-3	11/01/17 13:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-017	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-018	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-019	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-020	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-021	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-022	S	HA-9	11/01/17 15:40	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-023	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-024	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-025	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	

Inter-Office Shipment

IOS Number **1051320**

Date/Time: 11/03/17 10:48
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Jessica Kramer
Delivery Priority:
Air Bill No.: 770668844250

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
567388-026	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-027	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-028	S	HA-10	11/01/17 15:35	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-029	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-030	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-031	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-032	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-033	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-034	S	HA-11	11/01/17 15:15	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-035	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-036	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-037	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-038	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-039	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-040	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-041	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-042	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-043	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-044	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-045	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-046	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-047	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-048	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-049	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-050	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	

Inter-Office Shipment

IOS Number **1051320**

Date/Time: 11/03/17 10:48
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Jessica Kramer
Delivery Priority:
Air Bill No.: 770668844250

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
567388-051	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-052	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-053	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-054	S	BH-4	11/01/17 15:50	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-055	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-056	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-057	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-058	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-059	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-060	S	HA-12	11/01/17 17:20	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-061	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-062	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-063	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-064	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-065	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-066	S	HA-13	11/01/17 17:10	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-067	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-068	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-069	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-070	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-071	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	
567388-072	S	HA-14	11/01/17 17:05	E300	Inorganic Anions by EPA 300	11/08/17	11/29/17	KEB	CL	

Inter-Office Shipment

IOS Number **1051320**

Date/Time:	11/03/17 10:48	Created by:	Jessica Kramer
Lab# From:	**Midland**	Delivery Priority:	
Lab# To:	**Houston**	Air Bill No.:	770668844250

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Inter Office Shipment or Sample Comments:

Relinquished By: Jessica Kramer

Jessica Kramer

Date Relinquished: 11/03/2017

Received By:

Jean Quila

Date Received: 11/04/2017 10:30

Cooler Temperature: 3.6

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1051320

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used :

Sent By: Jessica Kramer **Date Sent:** 11/03/2017 10:48 AM

Received By: Jean Quila **Date Received:** 11/04/2017 10:30 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 *Custody Seals Signed and dated for Containers/coolers	**No**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 11/04/2017

Jean Quila

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Enviroclean- Midland

Date/ Time Received: 11/02/2017 04:21:00 PM

Work Order #: 567388

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Jessica Kramer Date: 11/03/2017
Jessica Kramer

Checklist reviewed by: Kelsey Brooks Date: 11/03/2017
Kelsey Brooks