

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	ARP Production Company, LLC	Contact	Randy L. Madison
Address	309 Silver St., Raton, NM 87740	Telephone No.	Office 575-445-6706 Cell 575-420-1120
Facility Name	VPR E-18	Facility Type	Gas Well

Surface Owner	Vermejo Park Ranch	Mineral Owner	APR Production Company, LLC	API No.	30-007-20308
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	33	32N	19E	1332.7	South	1265.3	West	Colfax

Latitude 36.961551 Longitude 104.931166

NATURE OF RELEASE

Type of Release	Produced Water	Volume of Release	21.5 Barrels	Volume Recovered	0
Source of Release	Water Line	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	9-22-15 @ 1000 hrs.
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	Mr. Leonard Lowe		
By Whom?	Randy L. Madison	Date and Hour	9-22-15 @ 1035		
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

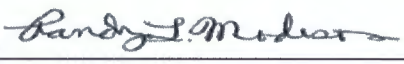
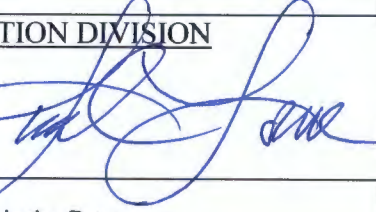
Describe Cause of Problem and Remedial Action Taken.*

It was discovered that a one inch nipple had corroded and caused the release. The line was isolated, excavated, and the nipple was replaced. The released water had evaporated and infiltrated the ground surface, so no fluid recovery was possible.

Describe Area Affected and Cleanup Action Taken.*

The water quality of produced water released is benign and will support vegetative growth. Please see attached sample analysis. However, since there was a release, Atlas will monitor the affected area for stressed vegetation, and appropriate actions will be taken if any issues are observed.

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: Randy L. Madison	Approved by Environmental Specialist: 		
Title: EHS Specialist	Approval Date: 9/22/15	Expiration Date:	
E-mail Address: rmadison@atlasenergy.com	Conditions of Approval:		Attached ☐
Date: 9/30/15	Phone: 575-445-6706		

* Attach Additional Sheets If Necessary

See Attached 6 Photos

From: [Madison, Randy L.](#)
To: [Lowe, Leonard, EMNRD](#)
Subject: Re: Release
Date: Tuesday, September 22, 2015 12:37:16 PM

This is fresh water per the water sample. We will monitor the area for vegetation kill.
Randy

Sent from my iPhone

On Sep 22, 2015, at 12:33, Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us> wrote:

Mr. Madison,

OCD has received and noted your verbal notification of your release at Vermajo Park.

Now please submit an official C-141 release form.

Note the Lat./Long. Is the location of the actual spill.

Please note the area size of the release.

What does Atlas's proposal for remediation.

Thank you,

Leonard Lowe

Environmental Engineer

[Environmental Bureau]

Oil Conservation Division

Energy Minerals and Natural Resources Department

1220 South St. Frances

Santa Fe, New Mexico 87004

Office: 505-476-3492

Fax: 505-476-3462

E-mail: leonard.lowe@state.nm.us

Website: <http://www.emnrd.state.nm.us/ocd/>

<C-141_Release Notification Form.pdf>

Water Analysis Report by Baker Petrolite

Company:	EL PASO E & P	Sales RDT:	44625
Region:	ROCKY MOUNTAINS	Account Manager:	TY CLINESMITH (575) 447-0621
Area:	RATON, NM	Sample #:	48997
Lease/Platform:	VERMEJO PARK RANCH 'E'	Analysis ID #:	113128
Entity (or well #):	18	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 48997 @ 75 °F					
Sampling Date:	09/21/11	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	10/07/11	Chloride:	71.0	2.	Sodium:	535.6	23.3
Analyst:	SANDRA GOMEZ	Bicarbonate:	1312.0	21.5	Magnesium:	0.8	0.07
TDS (mg/l or g/m3):	1928.5	Carbonate:	0.0	0.	Calcium:	2.0	0.1
Density (g/cm3, tonne/m3):	1.001	Sulfate:	3.0	0.06	Strontium:	0.3	0.01
Anion/Cation Ratio:	0.9999998	Phosphate:			Barium:	0.2	0.
Carbon Dioxide:		Borate:			Iron:	0.1	0.
Oxygen:		Silicate:			Potassium:	3.5	0.09
Comments:		Hydrogen Sulfide:			Aluminum:		
		pH at time of sampling:		8	Chromium:		
		pH at time of analysis:			Copper:		
		pH used in Calculation:		8	Lead:		
					Manganese:	0.025	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.21	0.00	-4.79	0.00	-4.86	0.00	-3.87	0.00	-0.95	0.00	0.19
100	0	-0.12	0.00	-4.80	0.00	-4.81	0.00	-3.84	0.00	-1.08	0.00	0.26
120	0	-0.04	0.00	-4.81	0.00	-4.73	0.00	-3.81	0.00	-1.19	0.00	0.36
140	0	0.06	0.35	-4.80	0.00	-4.64	0.00	-3.76	0.00	-1.28	0.00	0.49

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

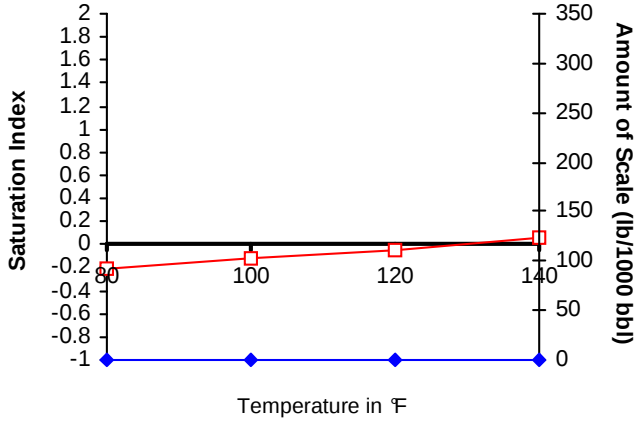
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

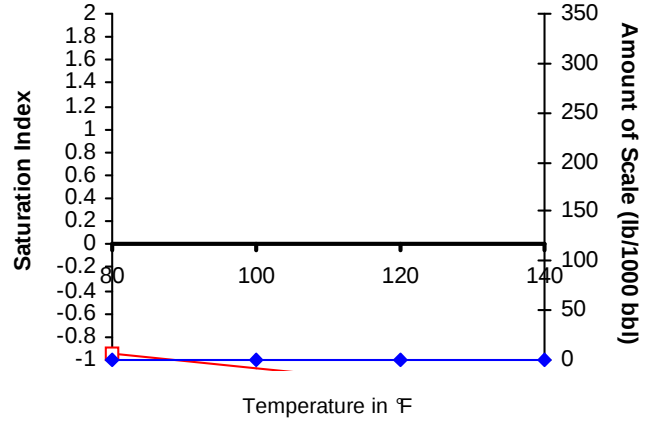
Scale Predictions from Baker Petrolite

Analysis of Sample 48997 @ 75 °F for EL PASO E & P, 10/07/11

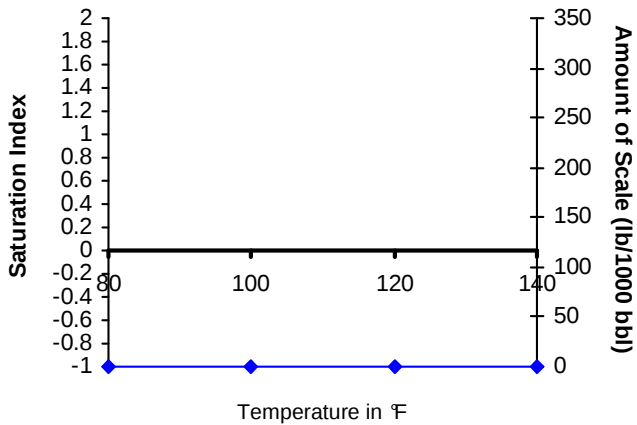
Calcite - CaCO_3



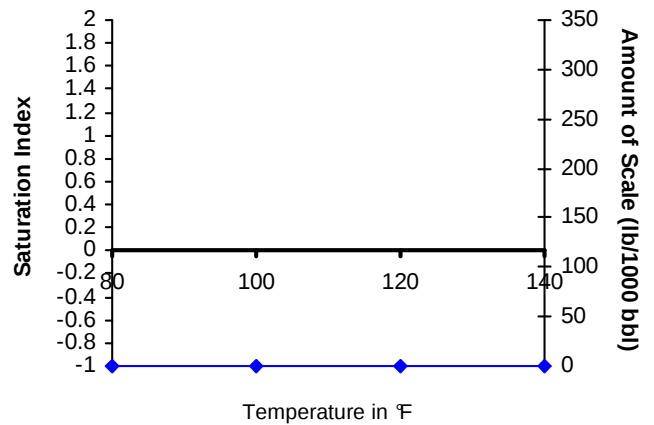
Barite - BaSO_4



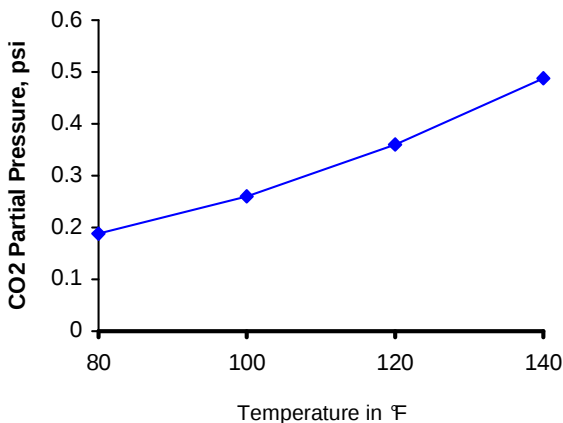
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4

