

ENVIRONMENTAL PLUS, INC.

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STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

PC
1/26/06

1 September 2005

Mr. Larry Johnson, Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: Initial C-141 Chesapeake Energy State L #2 – Reference #160024
UL-E (SW¼ of the NW¼) of Section 19, Township 17 South, Range 36 East
Latitude N 32° 49' 21.74" and Longitude W 103° 23' 55.79"

Dear Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of Mr. Bradley Blevins, Chesapeake Energy Corporation (Chesapeake), submits the attached New Mexico Oil Conservation Division (NMOCD) form C-141 for the above-referenced leak site located on land owned by Mr. Darr Angell. The site is located approximately 9.0 miles southwest of Lovington, New Mexico (reference *Figure 1*). Information obtained from the New Mexico Office of the State Engineer's website and a United States Geological Survey (USGS) database indicates there are two water supply wells located within a 1,000-foot radius of the release site (reference *Figure 2*). In addition, there are twelve wells located within a one-mile radius of the release site. Groundwater level data for the well labeled USGS #3 was recorded at 44.35 feet below ground surface (bgs) in January 2001. Groundwater level data for well number L05407 was recorded at 49 feet below ground surface (bgs) in June 1964. The average depth to water for all wells with recorded groundwater level data is approximately 54 feet bgs (reference *Table 1*). Based on this information, it is estimated that the depth to groundwater at the site is less than 50 feet bgs. The attached site information and metrics form ranks the site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993).

The release of 60 barrels of produced water and 5 barrels of oil was the result of structural failure within the pipeline. Upon being notified of the release, Chesapeake retained EPI to conduct emergency response measures at the site. EPI mobilized to the site, excavated the saturated soil and stockpiled it on plastic until such time that remediation activities could commence. To delineate the full extent of contamination, soil samples will be collected from the release area. A portion of each sample will be

P.O. BOX 1558 ••• 2100 WEST AVE. O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 FAX 505•394•2601

Incident - PAC 0602650156
Chesapeake
Coalition - 147179
PAC 0603051941

ENVIRONMENTAL PLUS, INC.

Mr. Larry Johnson
1 September 2005

Chesapeake

analyzed in the field for organic vapor and chloride concentrations. The remaining portion of the sample will be submitted for quantification of TPH, BTEX constituents and chloride to verify field analyses. EPI will provide Chesapeake and the NMOCD 48 hour notification prior to the collection of any samples to be submitted for laboratory analyses.

If there are any questions please feel free to contact me at (505) 394-3481 or via e-mail at PMcCasland@envplus.net or Mr. Bradley Blevins at (505) 391-1462 ext. 24 or via e-mail at bblevins@chkenergy.com. All official communication should be addressed to:

Mr. Bradley Blevins
Chesapeake Energy
5014 Carlsbad Highway
Hobbs, New Mexico 88240

Sincerely,

ENVIRONMENTAL PLUS, INC.

Pat McCasland
Safety Director

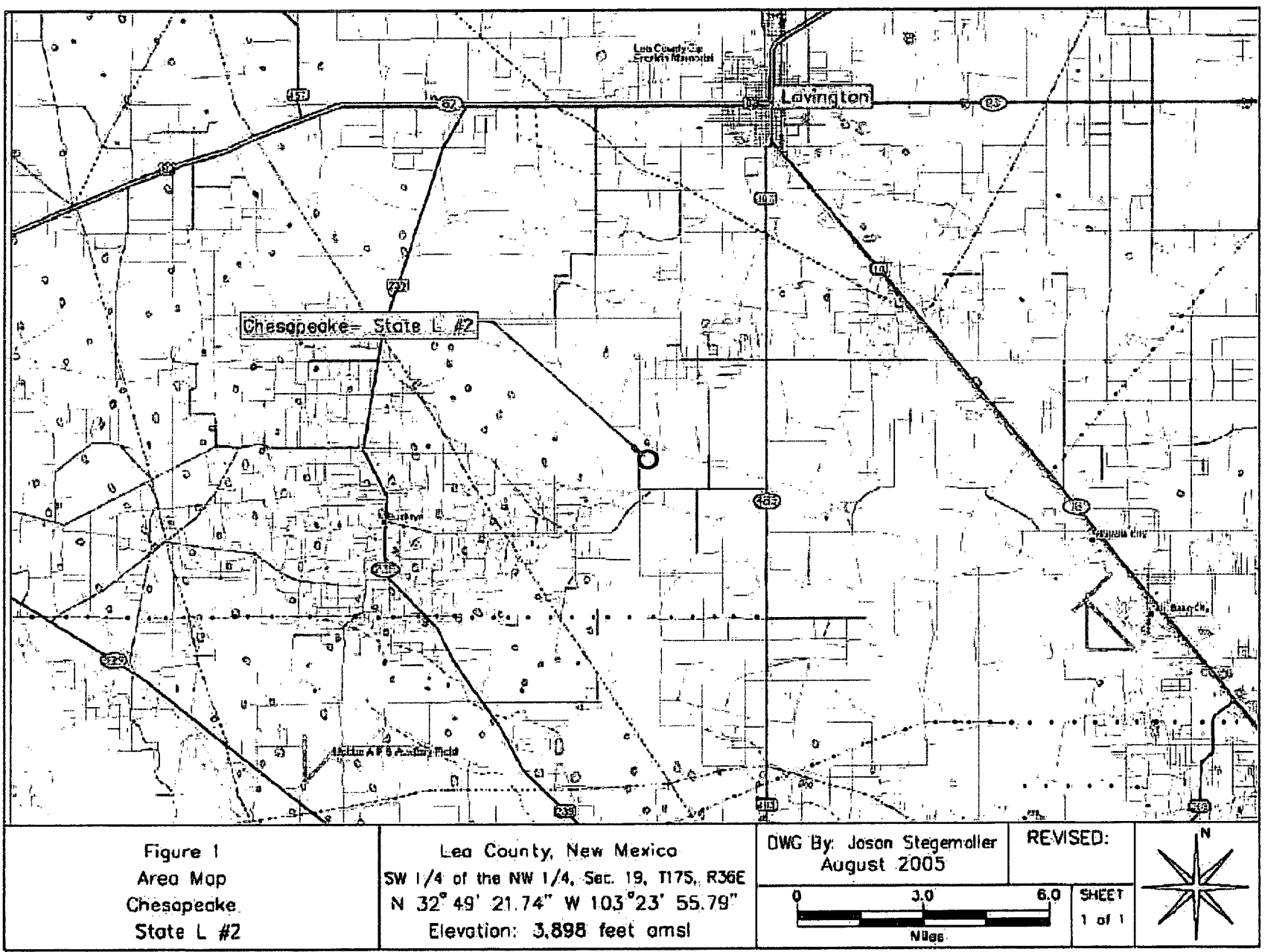
cc: Bradley Blevins, Chesapeake Energy – Hobbs, NM
Curtis Blake, Chesapeake Energy – Hobbs, NM
Jace Marshall, Chesapeake Energy – Oklahoma City, OK

Enclosures:

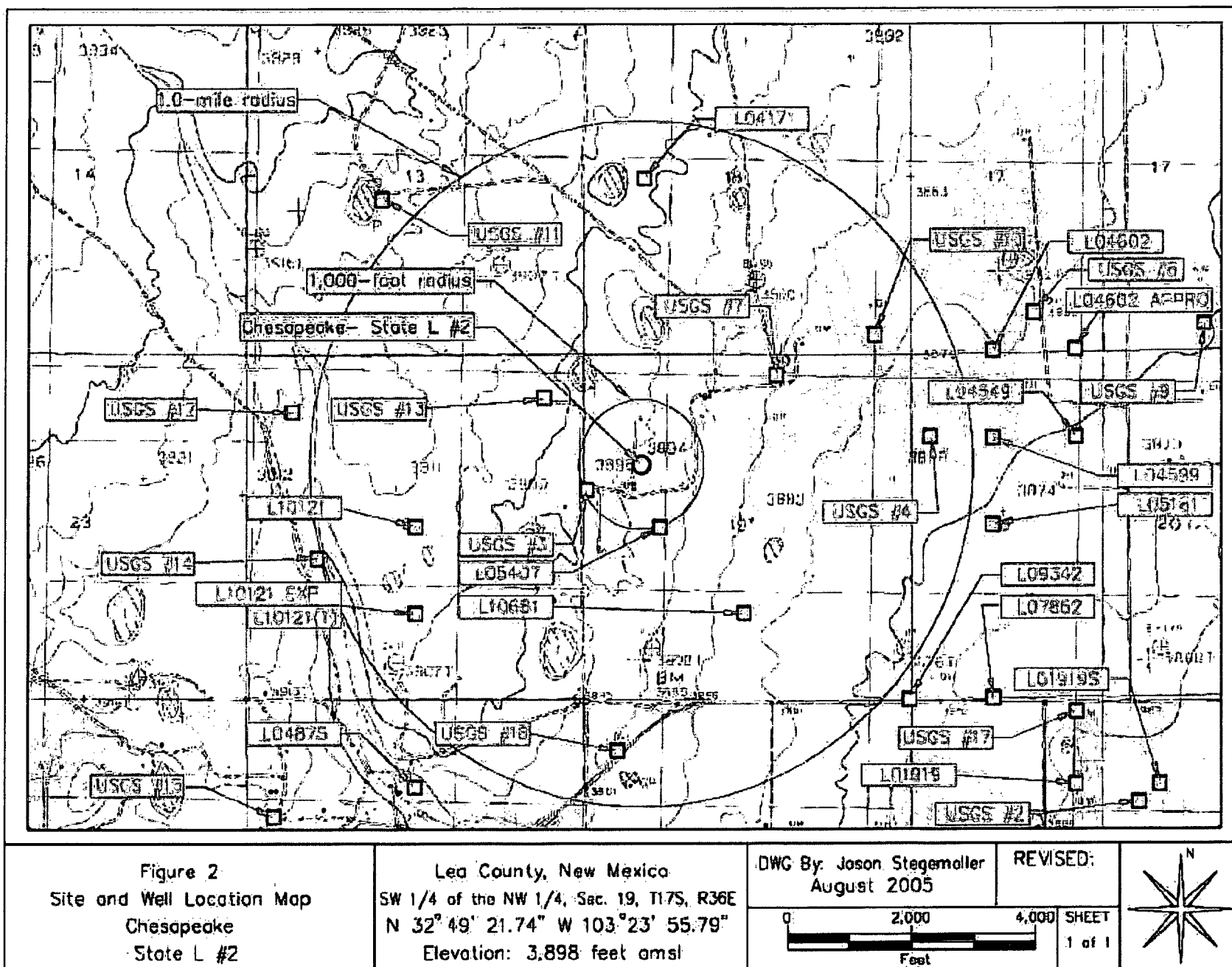
Site Information and Metrics
Initial C-141
Figure 1- Area Map
Figure 2- Site and Well Location Map
Figure 3- Site Map
Table 1- Well Data
Site Photographs

 Information and Metrics		Incident Date: August 11, 2005	NMOCD Notified: August 12, 2005
Site: State L #2		Assigned Site Reference #: 160024	
Company: Chesapeake Energy			
Street Address: 5014 Carlsbad Highway			
Mailing Address: 5014 Carlsbad Highway			
City, State, Zip: Hobbs, New Mexico 88240			
Representative: Bradley Blevins			
Representative Telephone: (505) 391-1462 ext. 24			
Telephone:			
Fluid volume released (bbls): 65 bbls.		Recovered (bbls): 0 gallons	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: State L #2			
Source of contamination: Pipeline release of approximately 65 bbls (60 bbls of produced water and 5 bbls of oil)			
Land Owner, i.e., BLM, ST, Fee, Other: Darr Angell			
LSP Dimensions: 63 feet by 36 feet			
LSP Area: ~ 8,000 ft ² impacted, with ~ 1,400 ft ² saturated			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: N 32° 49' 21.743"			
Longitude: W 103° 23' 55.798"			
Elevation above mean sea level: 3,898 feet			
Feet from South Section Line:			
Feet from West Section Line:			
Location- Unit or ¼¼: SW¼ of the NW¼		Unit Letter: E	
Location- Section: 19			
Location- Township: T17S			
Location- Range: R36E			
Surface water body within 1000' radius of site: none			
Domestic water wells within 1000' radius of site: one (USGS #3 and L05407 as illustrated on Figure 2)			
Agricultural water wells within 1000' radius of site: none			
Public water supply wells within 1000' radius of site: none			
Depth from land surface to ground water (DG): ~54 feet			
Depth of contamination (DC): unknown			
Depth to ground water (DG - DC = DtGW): <50 feet			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points		If >1000' from water source, or; >200' from private domestic water source: 0 points	
If Depth to GW >100 feet: 0 points			
Ground water Score = 20		Wellhead Protection Area Score = 20	
Site Rank (1+2+3) = 40		3. Distance to Surface Water Body	
		<200 horizontal feet: 20 points	
		200-100 horizontal feet: 10 points	
		>1000 horizontal feet: 0 points	
		Surface Water Score = 0	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

¹100 ppm field VOC headspace measurement may be substituted for lab analysis



Chesapeake #2
160024



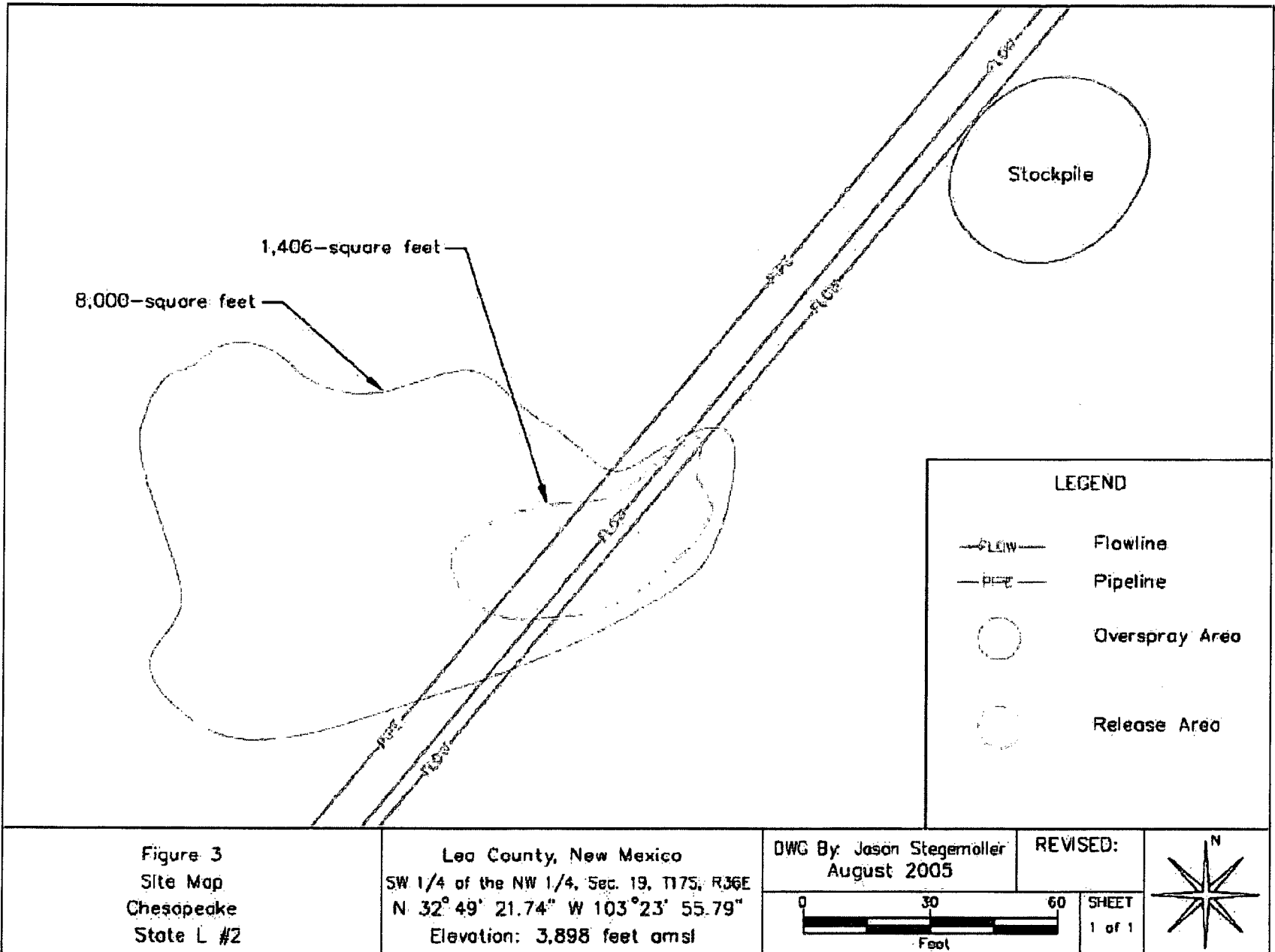


TABLE 1

Well Data

Chesapeake Energy State L #2 (Ref. #160024)

Well Number	Diversion ^A	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Well Depth (ft bgs)	Depth to Water (ft bgs)
L 01919	242.1	NOLAN H. BRUNSON	IRR	17S	36E	29 2 1 1	32° 48' 33.62"	103° 22' 34.74"		135	
L 01919 S		NOLAN H. BRUNSON		17S	36E	30 2 2 2	32° 48' 33.75"	103° 22' 19.24"	14-Jun-01	225	110
L 04171	3	NORWOOD DRILLING COMPANY	PRO	17S	36E	18 1 4	32° 50' 4.77"	103° 23' 52.25"	09-Jun-59	128	128
L 04171 APPRO		NORWOOD DRILLING COMPANY		17S	36E	20 2 1	32° 50' 4.77"	103° 23' 52.25"	09-Jun-59	128	128
L 04549	3	INC. CARPER DRILLING CO.	PRO	17S	36E	20 2 1	32° 49' 26"	103° 22' 34.92"	05-Nov-60	121	48
L 04549 APPRO		INC. CARPER DRILLING CO.		17S	36E	20 2 1	32° 49' 26"	103° 22' 34.92"	05-Nov-60	121	48
L 04570	220.2	NOLAN H. BRUNSON JR.	IRR	17S	36E	29 2 3 1	32° 48' 20.54"	103° 22' 34.68"		106	
L 04570 S		NOLAN H. BRUNSON JR.		17S	36E	29 2 4 4	32° 48' 20.7"	103° 22' 19.17"		205	
L 04599	3	GARDNER BROTHERS DRILLING CO.	PRO	17S	36E	20 1 2	32° 49' 25.91"	103° 22' 50.39"	16-Feb-61	128	38
L 04599 APPRO		GARDNER BROTHERS DRILLING CO.		17S	36E	20 1 2	32° 49' 25.91"	103° 22' 50.39"	16-Feb-61	128	38
L 04601	0	NOBLE DRG. CORP.	PRO	17S	36E	30	32° 47' 53.71"	103° 24' 6.86"	22-Jan-61	125	50
L 04602	3	HUMBLE OIL & REFINING COMPANY	PRO	17S	36E	17 3 4 2	32° 49' 39.02"	103° 22' 50.42"	16-Feb-61	115	45
L 04602 APPRO		HUMBLE OIL & REFINING COMPANY		17S	36E	17 4 3 2	32° 49' 39.1"	103° 22' 34.96"	16-Feb-61	115	45
L 04876	0	INC. B.L. MCFARLAND	PRO	17S	36E	29 3 4	32° 47' 54.16"	103° 22' 50.1"	12-Apr-62	130	75
L 05181	0	LOFFLAND BROTHERS COMPANY	PRO	17S	36E	20 1 4	32° 49' 12.8"	103° 22' 50.36"	21-Jun-63	125	75
L 05361	0	LOWE DRILLING CO.	PRO	17S	36E	20	32° 48' 46.48"	103° 23' 5.79"	11-Apr-64	123	90
L 05407	0	TRI SERVICE DRILLING COMPANY	PRO	17S	36E	19 1 4	32° 49' 12.37"	103° 23' 52.27"	10-Jun-64	108	49
L 05407 (1)	0	TRI-SERVICE DRILLING COMPANY	PRO	17S	36E	19 1 4	32° 49' 12.37"	103° 23' 52.27"			
L 07790	0	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	36E	29 4 3	32° 47' 54.38"	103° 22' 34.56"		225	
L 07791	0	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	36E	29 3 3	32° 47' 53.94"	103° 23' 5.63"		225	
L 07792	0	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	36E	30 4	32° 47' 53.82"	103° 23' 36.73"		225	
L 07793	200	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	36E	30 2	32° 48' 20.05"	103° 23' 36.74"			
L 07794	200	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	36E	30 1	32° 48' 19.9"	103° 24' 6.81"			
L 07862	3	R. A. ROGERS	DOM	17S	36E	20 3 4	32° 48' 46.59"	103° 22' 50.3"	13-Apr-78	110	58
L 07907	3	NOLAN H. JR. BRUNSON	DOM	17S	36E	29 2 3	32° 48' 20.54"	103° 22' 34.68"	05-Jun-78	150	45
L 08266 (6) EXP	0	ARCO OIL COMPANY	PRO	17S	36E	19 1 3 1	32° 48' 20.21"	103° 23' 5.71"			
L 08266 (7) EXP	0	TMBR SHARP DRILLING CO.	PRO	17S	36E	29 1 3 1	32° 48' 20.21"	103° 23' 5.71"			
L 09342	3	GREAT WESTERN DRILLING CO.	STK	17S	36E	20	32° 48' 46.48"	103° 23' 5.79"	28-Sep-83	138	60
L 10681	3	GOFF DAIRY	STK	17S	36E	19 4 1	32° 48' 59.38"	103° 23' 36.77"	02-Jul-97	120	40
L 04503	3	TRI SERVICE DRILLING CO.	PRO	17S	35E	24 2	32° 49' 12.51"	103° 24' 37.95"	10-Sep-60	90	43
L 04503 APPRO		TRI SERVICE DRILLING CO.		17S	35E	24 2	32° 49' 12.51"	103° 24' 37.95"	10-Sep-60	90	43
L 04875	0	INC. A. W. THOMPSON	PRO	17S	35E	25 2 1 1	32° 48' 33.26"	103° 24' 38.04"	12-Apr-62	130	71
L 06723 EXP	0	GILES M. LEE	DOM	17S	35E	25 1 4 2	32° 48' 20.27"	103° 24' 53.61"			
L 08124	0	HONDO DRILLING CO.	STK	17S	35E	25 4 4 4	32° 47' 53.82"	103° 24' 22.4"	03-Aug-79	125	58
L 08124 EXP		HONDO DRILLING CO.		17S	35E	25 4 4	32° 47' 53.82"	103° 24' 22.4"			
L 08124 (1) EXP	0	BTA OIL PRODUCERS	STK	17S	35E	25 4 4 4	32° 47' 53.82"	103° 24' 22.4"			
L 08124 (2) EXP	0	PIONEER PRODUCTION CORPORATION	PRO	17S	35E	25 4 4 4	32° 47' 53.82"	103° 24' 22.4"			
L 08124 (3) EXP	0	BTA OIL PRODUCERS	PRO	17S	35E	25 4 4 4	32° 47' 53.82"	103° 24' 22.4"			
L 08731	391	SOUTHWESTERN PUBLIC SERVICE	IND	17S	35E	25 1 4 2	32° 48' 20.27"	103° 24' 53.61"			
L 09727 EXP	0	GILES M. LEE	DOM	17S	35E	25 4	32° 47' 53.92"	103° 24' 37.94"			
L 10121	0	GILES M. LEE	STK	17S	35E	24 1 3 2	32° 48' 59.44"	103° 24' 38.01"			
L 10121 EXP		GILES M. LEE		17S	35E	24 3 1 4	32° 48' 59.7"	103° 25' 9.28"			
L 10121 (1)	0	ORYX ENERGY CO.	PRO	17S	35E	24 3 1 4	32° 48' 59.7"	103° 25' 9.28"			

TABLE 1

Well Data

Chesapeake Energy State L #2 (Ref. #160024)

Well Number	Diversions ^a	Owner	Use	Twp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Well Depth (ft bgs)	Depth to Water (ft bgs)
USGS #1				17S	35E	36 3 1 1	32° 47' 10"	103° 24' 55"	16-Jan-01	110	52.23
USGS #2				17S	35E	29 2 1 1	32° 48' 31"	103° 23' 33"	08-Feb-96	135	39.34
USGS #3				17S	35E	24 2 2 2	32° 49' 18"	103° 23' 6"	16-Jan-01	90	44.55
USGS #4				17S	35E	18 4 4 4	32° 49' 24"	103° 23' 24"	12-Jan-01	120	39.77
USGS #5				17S	35E	12 4 4 1	32° 49' 36"	103° 22' 3"	25-Jan-96	100	44.2
USGS #6				17S	35E	11 1 1 1	32° 51' 6"	103° 26' 0"	14-Feb-96	128	42.56
USGS #7				17S	36E	19 2 4 1			16-Jan-96		37.46
USGS #8				17S	36E	17 3 4 3			26-Feb-96		39.99
USGS #9				17S	36E	12 4 4 1			25-Jan-96		44.2
USGS #10				17S	36E	12 4 4 4			25-Jan-96		36.36
USGS #11				17S	35E	13 3 2 2			09-Feb-96		44.3
USGS #12				17S	36E	24 1 1 3			19-Dec-90		39.07
USGS #13				17S	35E	24 2 2 3			25-Jan-90		43.16
USGS #14				17S	35E	24 3 1 2			19-Dec-90		36.78
USGS #15				17S	35E	22 1 3 1			04-Mar-96		43.6
USGS #16				17S	35E	29 2 1 1			08-Feb-96		39.44
USGS #17				17S	35E	10 1 1 3			01-Mar-91		34.1

^a = Data obtained from the New Mexico Office of the State Engineer Website (http://winters.ose.state.nm.us/7001/WATERS-wr_RegisServlet)

Well locations shown in Figure 2

^a = in acre feet per annum

IND = Industrial

IRR = Irrigation

DOM = Domestic

EXP = Exploration

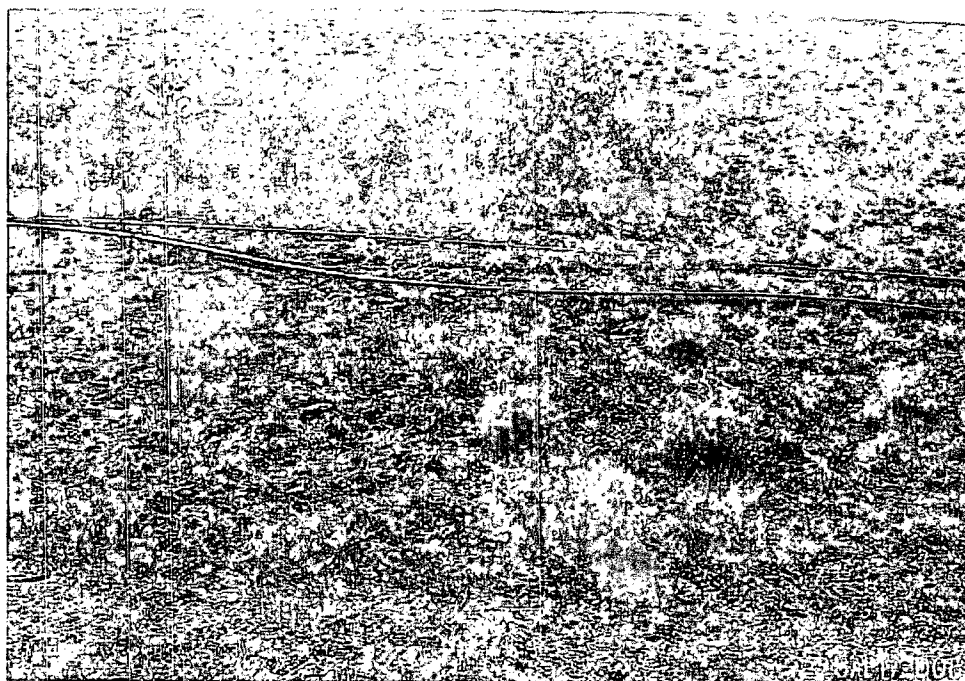
PRO = Prospecting or Development of Natural Resources

STK = Livestock Watering

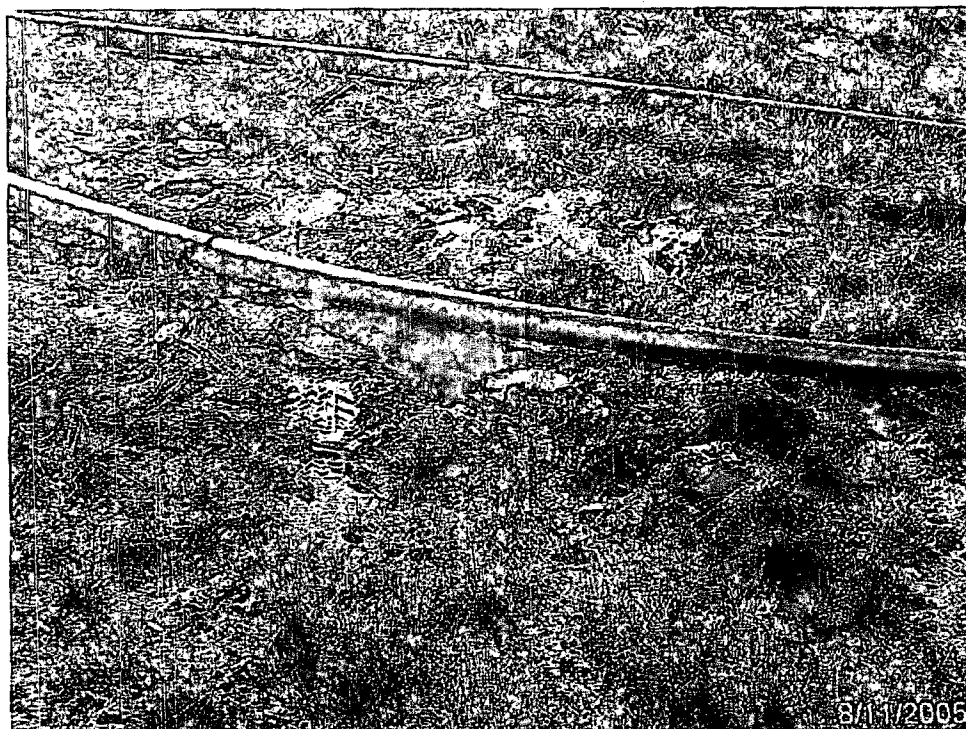
quarters are 1-NW, 2-NE, 3-SW, 4-SE; quarters are biggest to smallest



Photograph #1: Release area, looking northerly.



Photograph #2: Release area, looking northerly.



Photograph #3: Looking down on point of release in polyethylene pipeline.



Photograph #4: Release area looking northeasterly. Saturated soil is stockpiled on plastic in background of photograph

Mr. Larry Johnson
1 September 2005

Chesapeake

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1100 Rio Huerfano 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 October 19, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Chesapeake Energy	Contact: Bradley Blevins
Address: 5014 Carlsbad Highway	Telephone No.: (505) 391-1462 ext. 24
Facility Name: State L #2	Facility Type: Flowline

Surface Owner: Darr Angell	Mineral Owner:	Lease No.: 3002523852
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API # 3002523852 0000

LOCATION OF RELEASE

Unit Letter E	Section 19	Township 17S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude: N 32° 49' 21.74" Longitude: W 103° 23' 55.79"

NATURE OF RELEASE

Type of Release: Produced Water (60 bbls) and Oil (5 bbls)	Volume of Release: 65	Volume Recovered: 0 gallons
Source of Release: Flowline	Date and Hour of Occurrence: August 11, 2005 @ 5:00 P.M.	Date and Hour of Discovery: August 11, 2005 @ 5:00 P.M.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Larry Johnson, NMOCD-Hobbs	
By Whom? Bradley Blevins, Chesapeake	Date and Hour: August 12, 2005 @ 8:46 A.M.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse: Not Applicable	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.* Polyethylene flowline release of produced water and oil. Saturated soil was scraped up and placed on plastic pending a decision as how to remediate the site.

Describe Area Affected and Cleanup Action Taken.* Approximately 8,000 square feet of surface area was impacted by the release, with approximately 1,400 square feet of soil saturated. Saturated soil has been excavated and stockpiled on plastic on site until a remediation plan is developed. The site will be delineated and contaminated soil above NMOCD remedial guidelines has been excavated. The excavated soil will then be transported to an approved treatment facility or blended with clean soil and returned to the excavation.

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: Bradley Blevins	Approved by District Supervisor:		
Title: Field Technician	Approval Date:	Expiration Date:	
E-mail Address: bblevins@chkenary.com	Conditions of Approval:		Attached ☐
Date:	Phone: (505) 391-1462 ext. 24		

* Attach Additional Sheets If Necessary