



ENVIRONMENTAL PLUS, INC.  
 CONSULTING AND ENVIRONMENTAL REMEDIATION

23 May, 2008

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

RECEIVED

MAY 23 2008

HOBBS OCD

RE: **Closure Report**  
 Chesapeake Operating, Inc.  
 Keller 27 Federal No. 2  
 UL-K (NE¼ of the SW¼) of Section 27, T23S, R34E  
 Longitude: N32° 16' 25.45"; Latitude: W103° 27' 35.28"  
 Lea County, New Mexico  
 NMOCD Ref. 1RP #1846; EPI Ref. #160097A

Dear Mr. Williams:

On April 14, 2008, Environmental Plus, Inc. (EPI) was notified by Chesapeake Operating, Inc. of a release at the above referenced Site. Discovered on April 14, 2008 at 6:00 am the release comprised twenty (20) barrels of petroleum product with zero (0) barrels recovered. EPI performed GPS surveying, photographic documentation and characterization of the site. In conjunction with site assessment activities, an Emergency Response team mobilized to contain and remediate the impacted area.

On behalf of Chesapeake Operating, Inc., EPI submits the attached *Closure Report Letter* describing remedial activities undertaken to remediate the release area into conformity with New Mexico Oil Conservation Division (NMOCD) requirements. For clarity and cross reference elimination purposes, the *Closure Report Letter* offers Site Background history, Site Delineation, Remediation Activities and Conclusion.

**Site Background**

The Site is located in UL-K (NE ¼ of the SW¼) of Section 27, T23S, R34E at an elevation of approximately 3,476 feet above mean sea level (amsl). The property is owned by the United States Department of the Interior and managed by the Bureau of Land Management (BLM). A search for water wells was completed utilizing the New Mexico Office of the State Engineers website and a database maintained by the United States Geological Survey (USGS). No wells (domestic, agriculture or public) or bodies of surface water exist within a 1,000 feet radius of the Site (reference *Figure 2*). Groundwater data indicates average water depth is approximately 253 feet below ground surface (bgs). Based on available information, it was projected distance between known impacted soil and groundwater is greater than 200 vertical feet. Utilizing this information, New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site were determined as follows:

ENVIRONMENTAL PLUS, INC.



Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	5,000 parts per million

\* Chloride residuals may not be capable of impacting local groundwater above NMWQCC Ground Water Standards of 250 mg/L

- A. **Site Delineation** – On April 14, 2008 EPI conducted a site assessment consisting of GPS surveying and photographing the release area. Approximately 15,220-ft<sup>2</sup> of surface area was inundated by the release with an additional 131,000-ft<sup>2</sup> of pasture land receiving overspray mist. Majority of the inundated area was contained on the caliche production pad. Three (3) minor sections of pasture land were affected (reference *Figure 3*). An EPI Emergency Response Team excavated and transported approximately 14 yds<sup>3</sup> of surface contaminated material to EPI Landfarm for treatment. The overspray area vegetation was mowed to a manageable height utilizing a brush hog. The area was sprayed with a 6% solution of *Micro-Blaze*<sup>TM</sup> to accelerate natural attenuation of surficial TPH contaminants.
- B. **Remedial Activities** - From April 14, 2008 through April 21, 2007, approximately 676 yds<sup>3</sup> of impacted material were excavated from combined surface area of ±17,525-ft<sup>2</sup> at depths ranging from 0.5- to 1.83-feet bgs. Impacted soil was transported to EPI and Pitchfork Landfarms for treatment. During excavation activities, soil samples were collected from sidewalls and bottom at varying depths for field analyses and confirmatory laboratory analytical results.

On April 17, 2008 fourteen (14) soil samples were collected from excavation sidewalls and bottom of three (3) minor excavations adjacent to the caliche production pad and transported to an independent laboratory for analysis of TPH constituents (reference *Figure 4*). TPH concentrations ranged from <20.0 mg/Kg to 263 mg/Kg (reference *Table 2*).

On April 22, 2008 four (4) composite soil samples were collected from the excavation located on the caliche production pad (reference *Figure 4*). TPH concentrations ranged from <20.0 mg/Kg to 261 mg/Kg (reference *Table 2*).

On April 23, 2008 excavation located on the caliche production pad was backfilled with clean caliche (~462 yds<sup>3</sup>). Backfilling activities continued through April 25, 2008 with excavated areas outside the caliche production pad filled with native topsoil (154 yds<sup>3</sup>). Both caliche and topsoil material were transported to the site from a private pit. Disturbed areas within the caliche production pad were contoured to allow vehicular traffic and promote controlled natural drainage. Contiguous areas outside the caliche production pad were similarly contoured to allow natural drainage and will be disked and seeded with a blend preferred by the BLM.



- C. **Recommendations** - Analytical data confirmed sidewalls and bottom were void of hydrocarbon impacted soil in excess of remedial threshold standards. In view of extensive efforts exerted to remediate the release area, EPI requests the NMOCD require no additional remedial activity of the site and issue Chesapeake Operating, Inc. a *Site Closure Letter*.

Please address questions, concerns and/or needs for additional technical information to David P. Duncan at (575) 394-3481 (office), (575) 441-7802 (cellular) or via e-mail at [dduncan@envplus.net](mailto:dduncan@envplus.net). Official communications should be directed to Mr. Bradley Blevins at (575) 391-1462, Ext. 6224 (office), (575) 441-0341 (mobile) or via e-mail at [bblevins@chkenergy.com](mailto:bblevins@chkenergy.com) with correspondence addressed to:

Mr. Bradley Blevins  
Field Supervisor  
Chesapeake Operating, Inc.  
1616 West Bender  
Hobbs, New Mexico 88240

Sincerely,

Brandon Farrar  
Environmental Consultant

Cc: Harlan Brown, Sr. Envr. Representative, Chesapeake Energy – Oklahoma City, OK  
Bradley Blevins, Field Supervisor, Chesapeake Operating, Inc. – Hobbs, NM  
Trishia C. Bad Bear, BLM – Hobbs, NM  
Jim Keller, Agriculture Lessee - Oakley, KS  
File

Encl: Figure 1 – Area Map  
Figure 2 – Site Location Map  
Figure 3 – Site Map  
Figure 4 – Excavation and Sample Map  
Table 1 – Well Data  
Table 2 – Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results  
Attachment I – Site Photographs  
Attachment II – Laboratory Analytical Results and Chain-of-Custody Forms



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Attachment III – Information and Metrics  
Initial NMOC Form C-141  
Final NMOC Form C-141

**FIGURES**

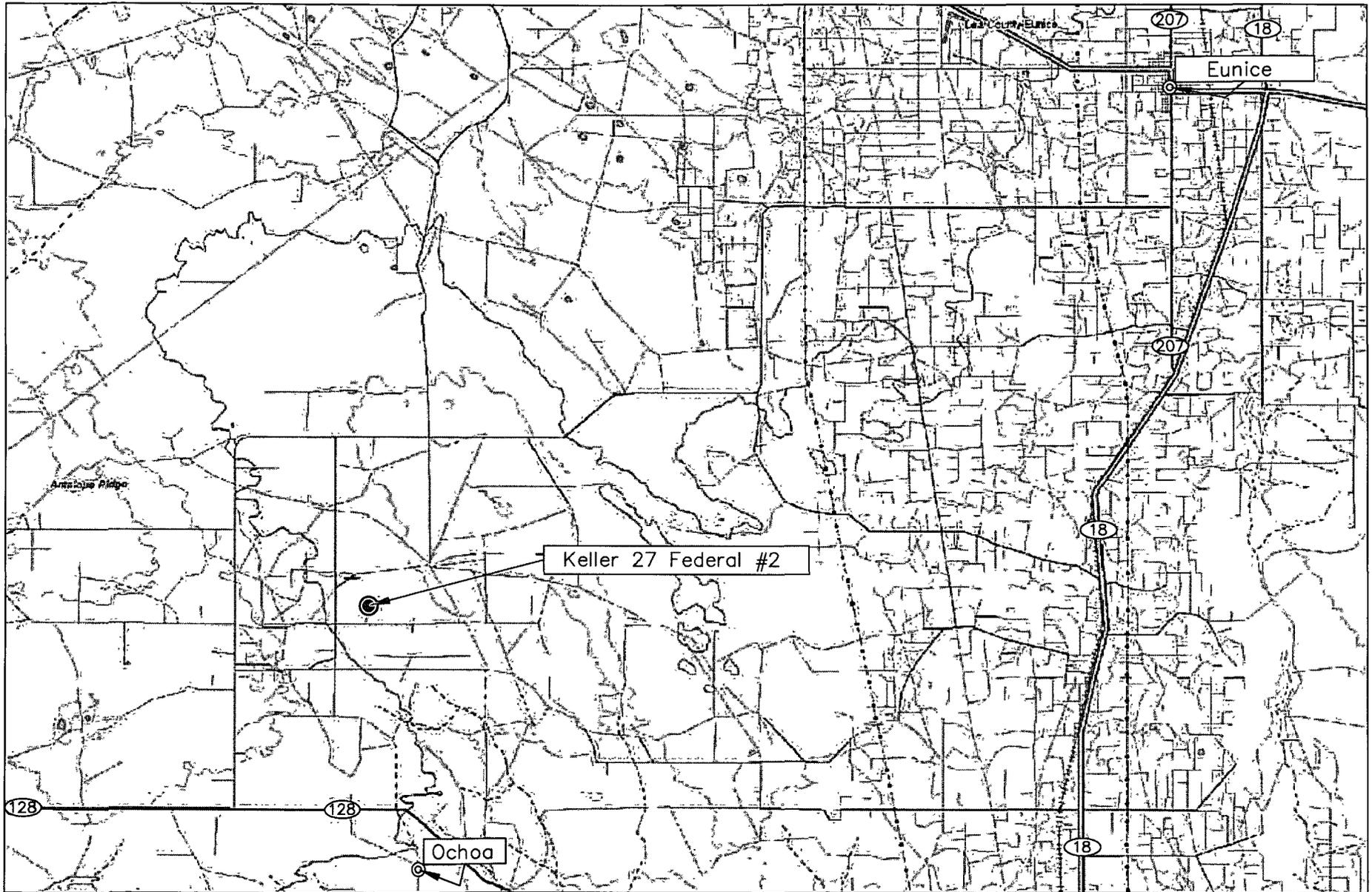
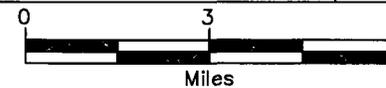


Figure 1  
 Area Map  
 Chesapeake Operating Inc.  
 Keller 27 Federal #2

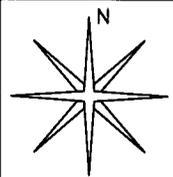
Lea County, New Mexico  
 NE 1/4 of the SW 1/4, Sec. 27, T23S, R34E  
 N 32°16' 25.45" W 103°27' 35.28"  
 Elevation: 3,476 feet amsl

DWG By: D Dominguez  
 April 2008

REVISED:



SHEET  
 1 of 1



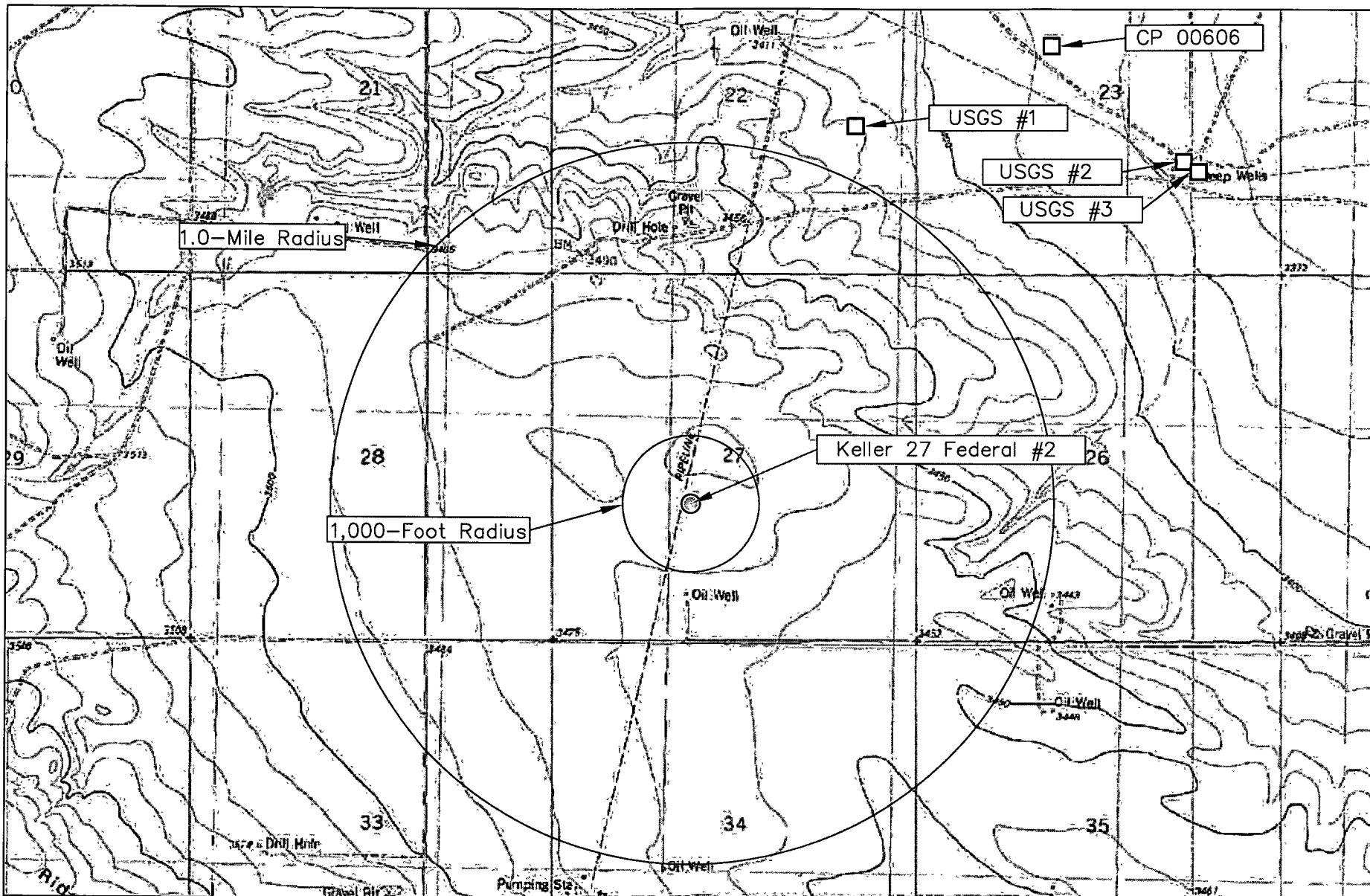
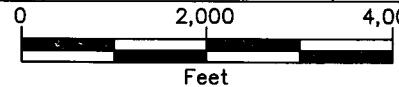


Figure 2  
 Site Location Map  
 Chesapeake Operating Inc.  
 Keller 27 Federal #2

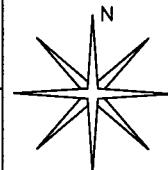
Lea County, New Mexico  
 NE 1/4 of the SW 1/4, Sec. 27, T23S, R34E  
 N 32°16' 25.45" W 103°27' 35.28"  
 Elevation: 3,476 feet amsl

DWG By: D Dominguez  
 April 2008

REVISED:



SHEET  
 1 of 1



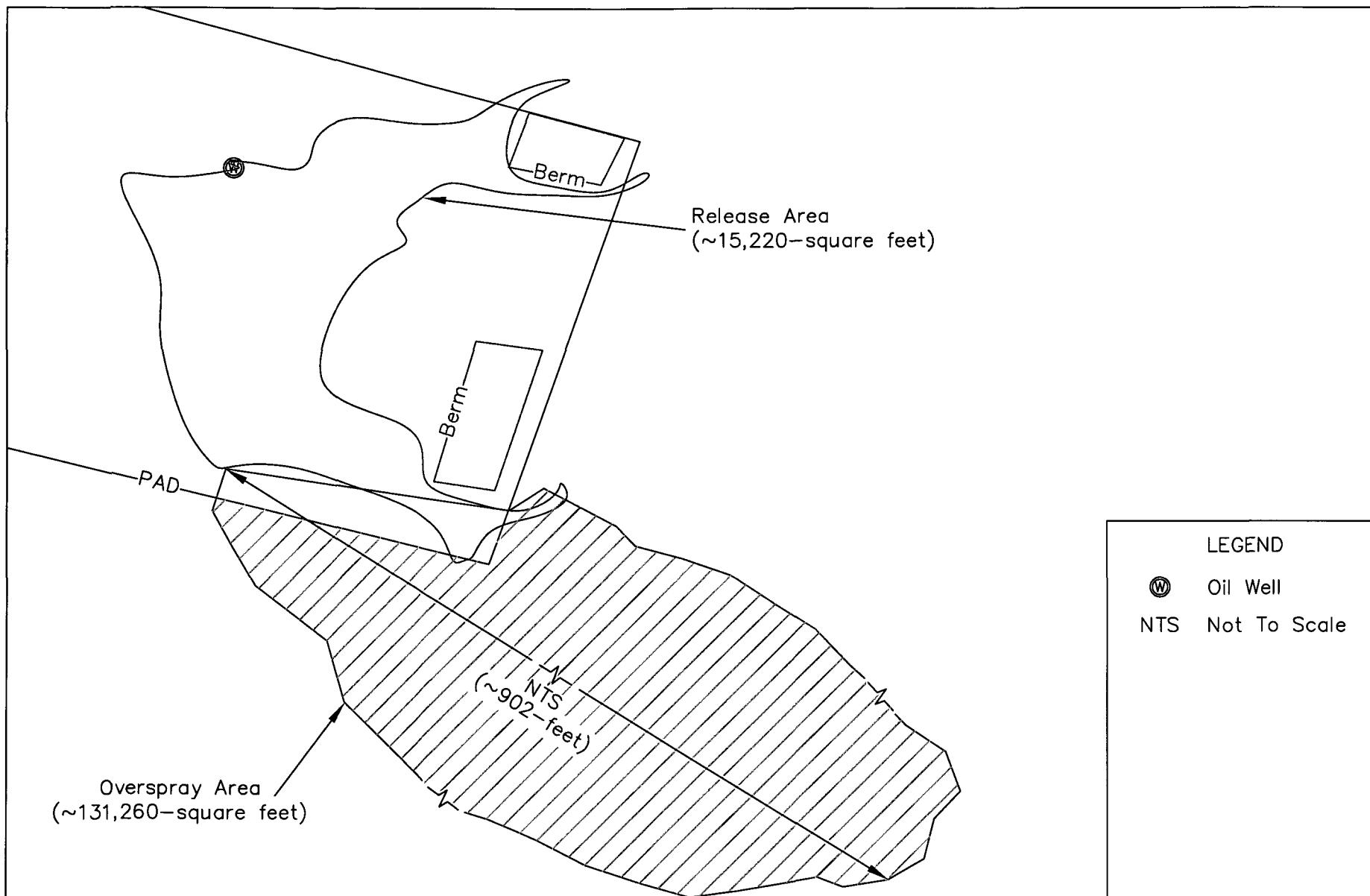
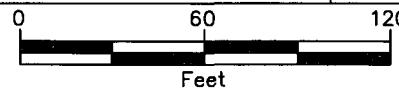


Figure 3  
 Site Map  
 Chesapeake Operating Inc.  
 Keller 27 Federal #2

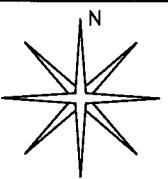
Lea County, New Mexico  
 NE 1/4 of the SW 1/4, Sec. 27, T23S, R34E  
 N 32° 16' 25.45" W 103° 27' 35.28"  
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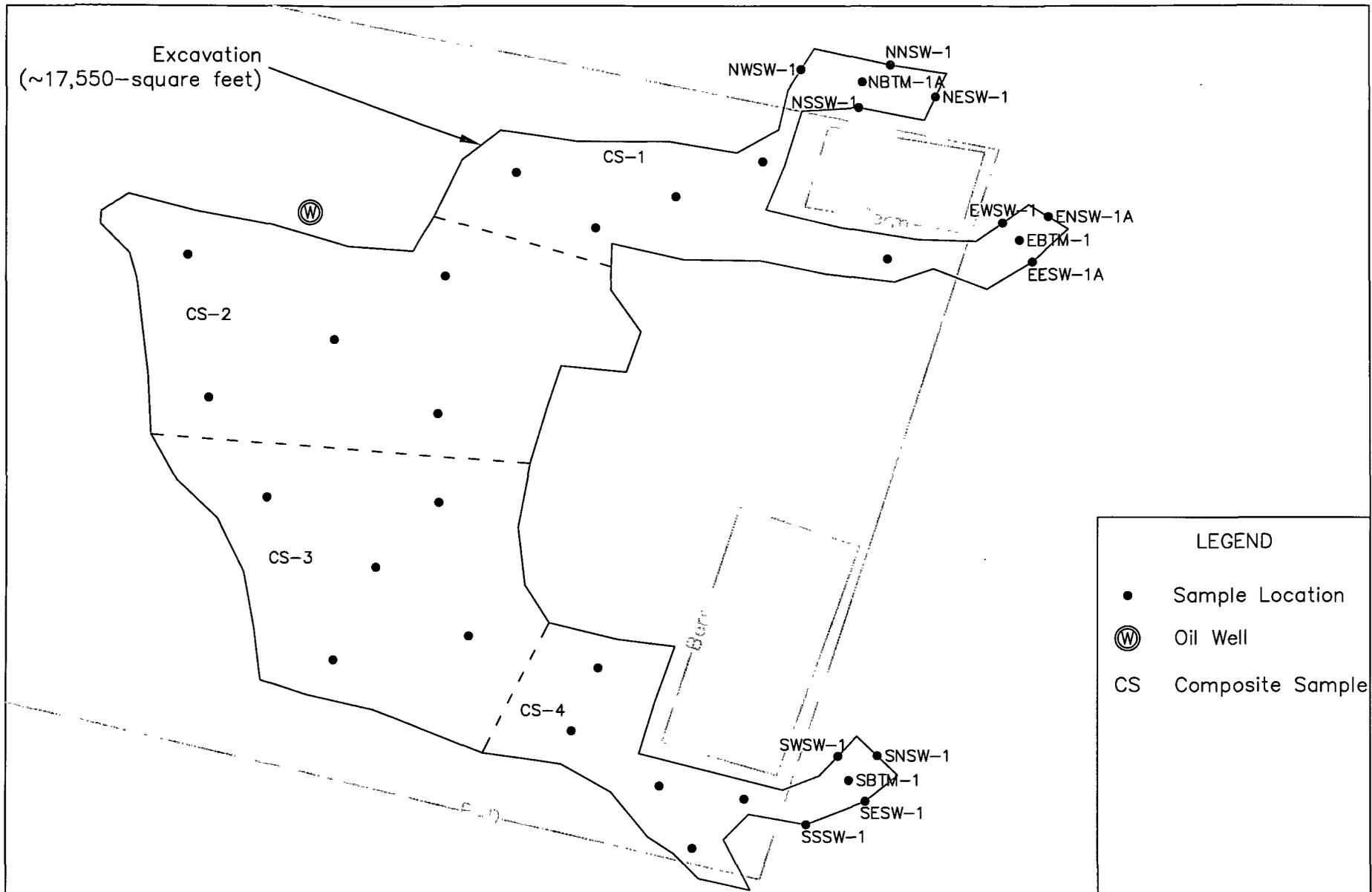
DWG By: D Dominguez  
 April 2008

REVISED:



SHEET  
 1 of 1





LEGEND

- Sample Location
- Ⓜ Oil Well
- CS Composite Sample

Figure 4  
Excavation and Sample Map  
Chesapeake Operating Inc.  
Keller 27 Federal #2

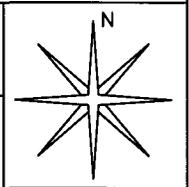
Lea County, New Mexico  
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N 32° 16' 25.45" W 103° 27' 35.28"  
Elevation: 3,476 feet amsl

DWG By: D Dominguez  
April 2008

0 35 70  
Feet

REVISED:

SHEET  
1 of 1



**TABLES**

TABLE 1

Well Data

Chesapeake Operating Inc. - Keller 27 Federal #2 (EPI Ref. # 160097A)

Well Number	Diversion <sup>A</sup>	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation <sup>B</sup>	Depth to Water (ft bgs)
CP 00606	0	NATOMAS NORTH AMERCIA, INC.	PRO	23S	34E	23 1 4	N32° 17' 30.76"	W103° 26' 34.57"	26-Jul-79	3,389	265
USGS #1				23S	34E	22 4 2 1			08-Mar-96	3,420	282.2
USGS #2				23S	34E	23 4 2 3			30-Mar-81	3,375	234.91
USGS #3				23S	34E	23 4 2 3			13-Jan-71	3,375	233.06

\* = Data obtained from the New Mexico Office of the State Engineer Website ([http://iwaters.ose.state.nm.us:7001/iWATERS/wr\\_RegisServlet1](http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)) and USGS Database

<sup>A</sup> = In acre feet per annum

<sup>B</sup> = Elevation interpolated from USGS topographical map based on referenced location.

PRO = 72-12-1 Prospecting or development of natural resource

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

Shaded area indicates wells not shown in Figure 2

TABLE 2

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

## Chesapeake Energy - Keller 27 Federal #2 (EPI Ref. #160097A)

Sample ID	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
NNSW-1	0.83	In situ	17-Apr-08	3.9	160	--	--	--	--	--	<10.0	<10.0	<20.0	--
NBTM-1	1.83	Excavated	17-Apr-08	200.3	200	--	--	--	--	--	<10.0	<10.0	<20.0	--
NBTM-1A	1.83	In situ	17-Apr-08	49.7	--	--	--	--	--	--	<10.0	62.7	62.7	--
NSSW-1	0.83	In situ	17-Apr-08	33.2	180	--	--	--	--	--	<10.0	<10.0	<20.0	--
EBTM-1	1.0	In situ	17-Apr-08	23.8	240	--	--	--	--	--	<10.0	54.5	54.5	--
ENSW-1	0.5	Excavated	17-Apr-08	217.1	240	--	--	--	--	--	<10.0	<10.0	<20.0	--
ENSW-1A	0.5	In situ	17-Apr-08	35.8	--	--	--	--	--	--	<10.0	<10.0	<20.0	--
EWSW-1	0.5	In situ	17-Apr-08	60.5	160	--	--	--	--	--	<10.0	263	263	--
EESW-1	0.5	Excavated	17-Apr-08	236.0	240	--	--	--	--	--	<10.0	<10.0	<20.0	--
EESW-1A	0.5	In situ	17-Apr-08	31.7	--	--	--	--	--	--	<10.0	<210.0	<20.0	--
NESW-1	0.67	In situ	17-Apr-08	33.7	240	--	--	--	--	--	<10.0	<10.0	<20.0	--
NWSW-1	0.83	In situ	17-Apr-08	44.6	220	--	--	--	--	--	<10.0	<10.0	<20.0	--

TABLE 2

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

## Chesapeake Energy - Keller 27 Federal #2 (EPI Ref. #160097A)

Sample ID	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
SSSW-1	0.5	In situ	17-Apr-08	20.3	--	--	--	--	--	--	<10.0	<10.0	<20.0	--
SNSW-1	0.5	In situ	17-Apr-08	48.3	--	--	--	--	--	--	<10.0	56.3	56.3	--
SESW-1	0.6	In situ	17-Apr-08	12.8	240	--	--	--	--	--	<10.0	<10.0	<20.0	--
SBTM	1.0	In situ	17-Apr-08	46.5	160	--	--	--	--	--	<10.0	<10.0	<20.0	--
SWSW-1	0.5	In situ	17-Apr-08	40.0	--	--	--	--	--	--	<10.0	<10.0	<20.0	--
CS-1	0.5	In situ	22-Apr-08	76.3	--	--	--	--	--	--	<10.0	86.8	86.8	--
CS-2	1	In situ	22-Apr-08	56.0	--	--	--	--	--	--	<10.0	92.7	92.7	--
CS-3	0.5	In situ	22-Apr-08	97.3	--	--	--	--	--	--	<10.0	261	261	--
CS-4	1	In situ	22-Apr-08	53.1	--	--	--	--	--	--	<10.0	<10.0	<20.0	--
NMOCD Remedial Thresholds				100		10				50			5,000	250 <sup>1</sup>

*Bolded values are in excess of NMOCD Remediation Threshold Goals*

*BH = Bottom Hole*

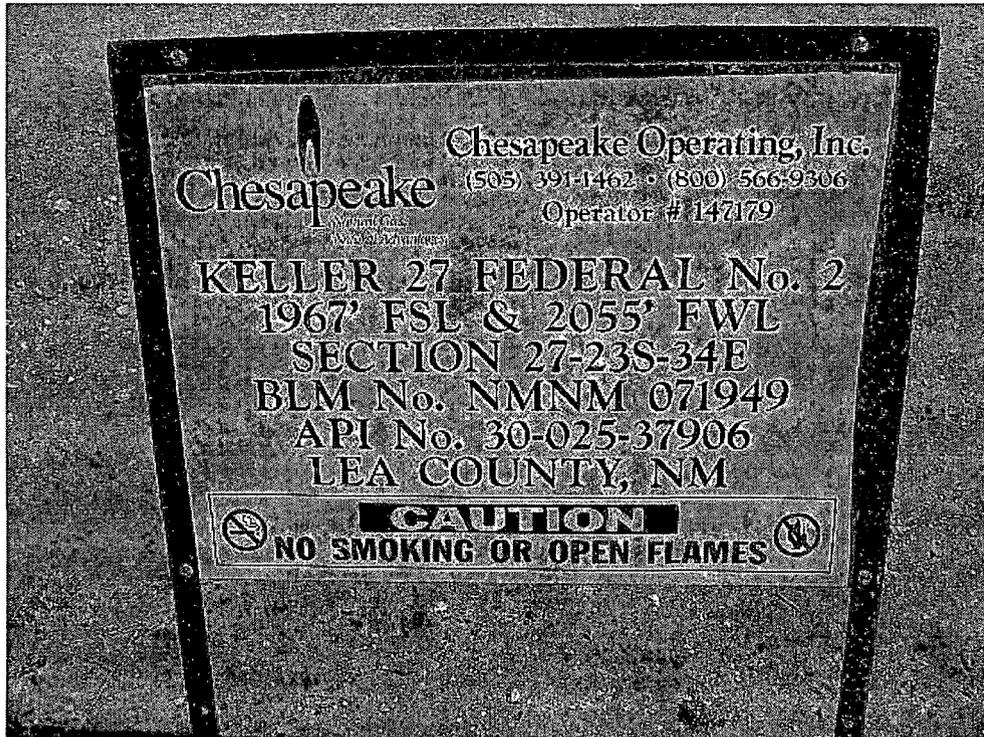
*SW = Sidewall, N = North side, S = South side, W = West side and E = East side*

<sup>1</sup> = Chloride and sulfate residuals may not be capable of impacting local groundwater above NMWQCC Groundwater Standards of 250 mg/Kg and 600 mg/Kg, respectively

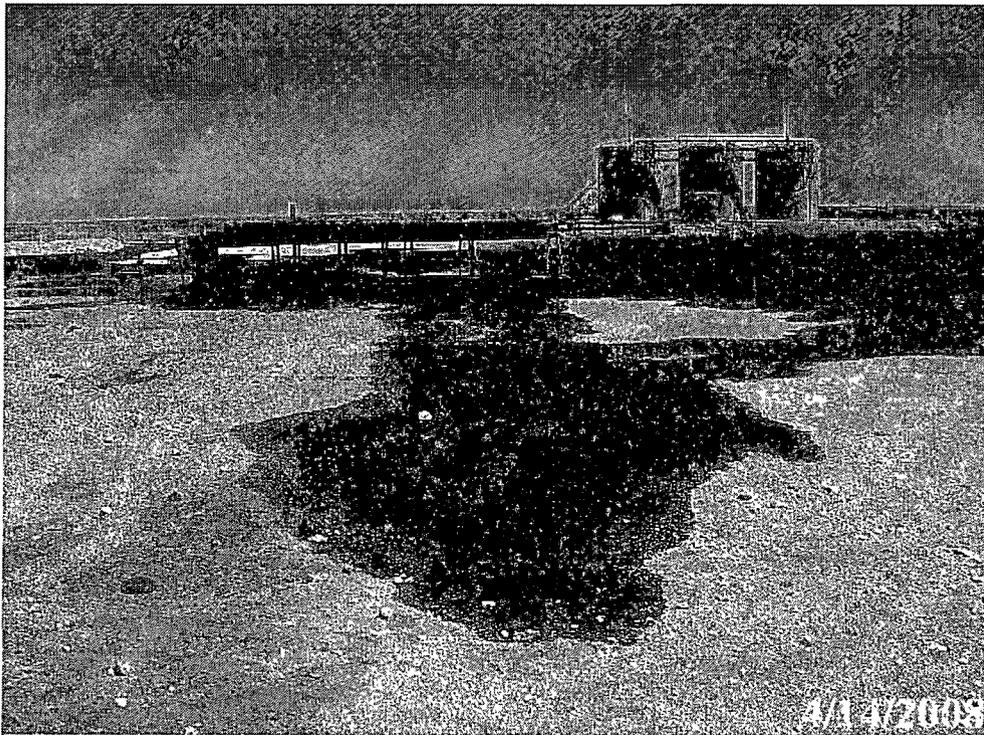
*Shaded areas indicate soil samples collected from In-situ sample points*

**ATTACHMENTS**

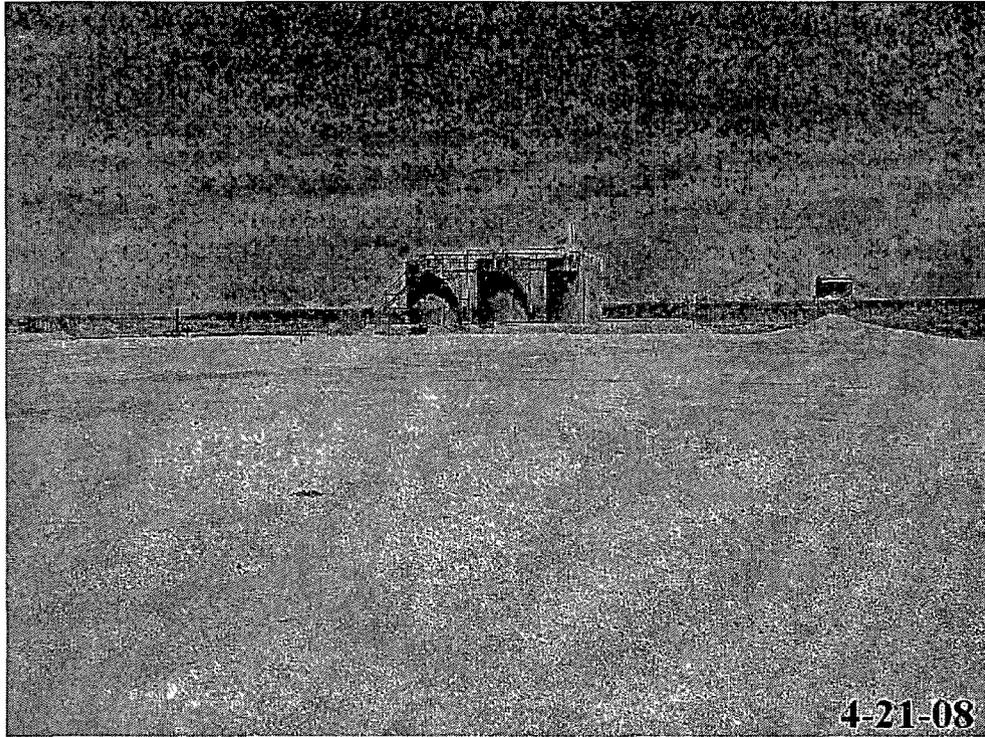
**ATTACHMENT I  
SITE PHOTOGRAPHS**



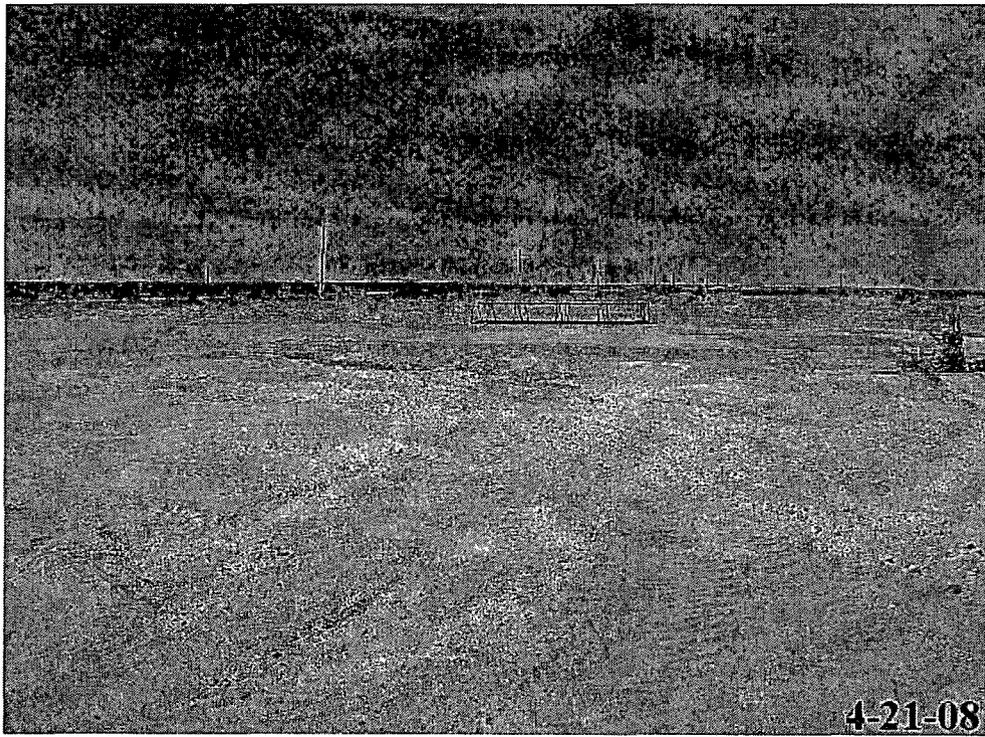
Photograph No. 1 – Lease Sign.



Photograph No. 2 – Looking southeasterly across release area.



Photograph No. 3 – Looking southeasterly across excavation area.



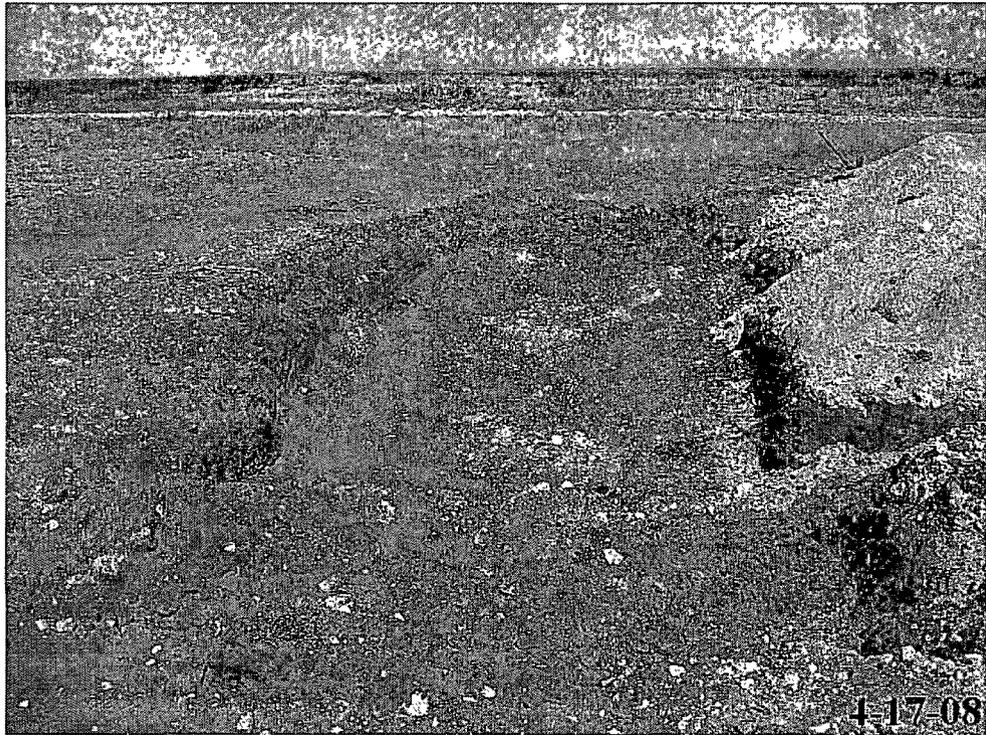
Photograph No. 4 – Looking northwesterly across excavation area.



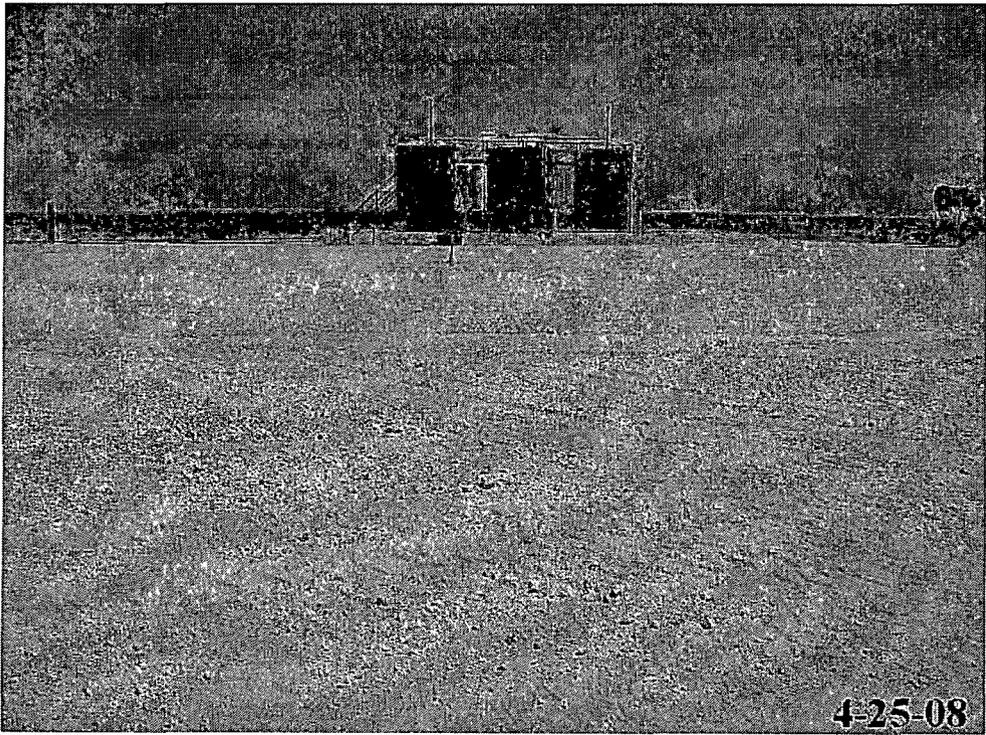
Photograph No. 5 – Looking northerly across excavation area.



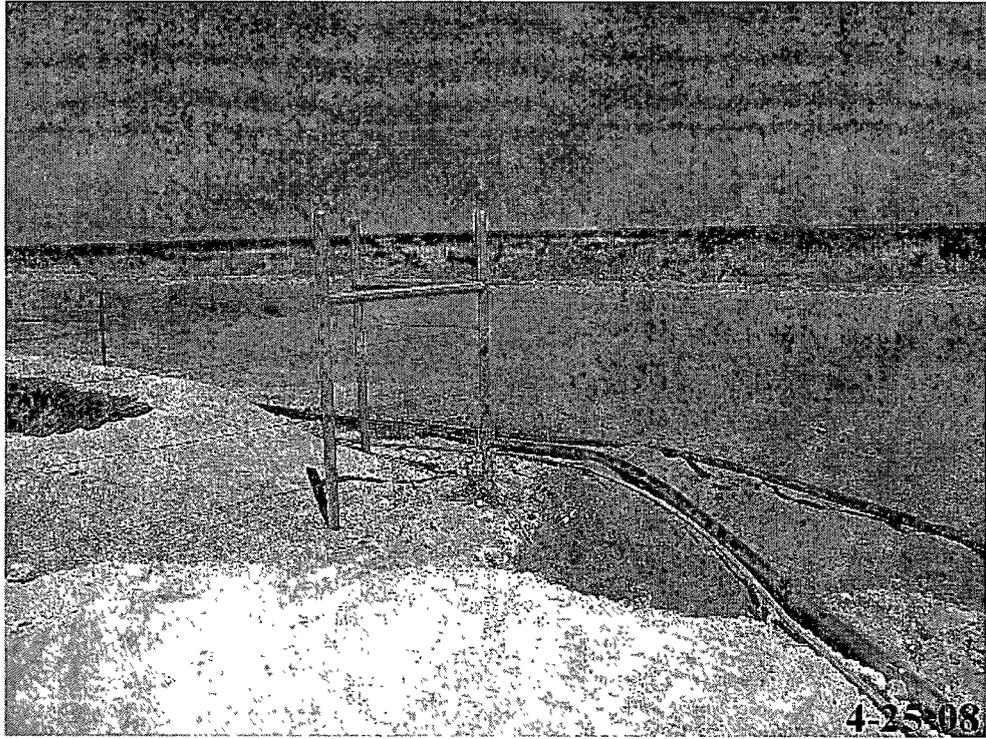
Photograph No. 6 – Looking northeasterly across excavation area.



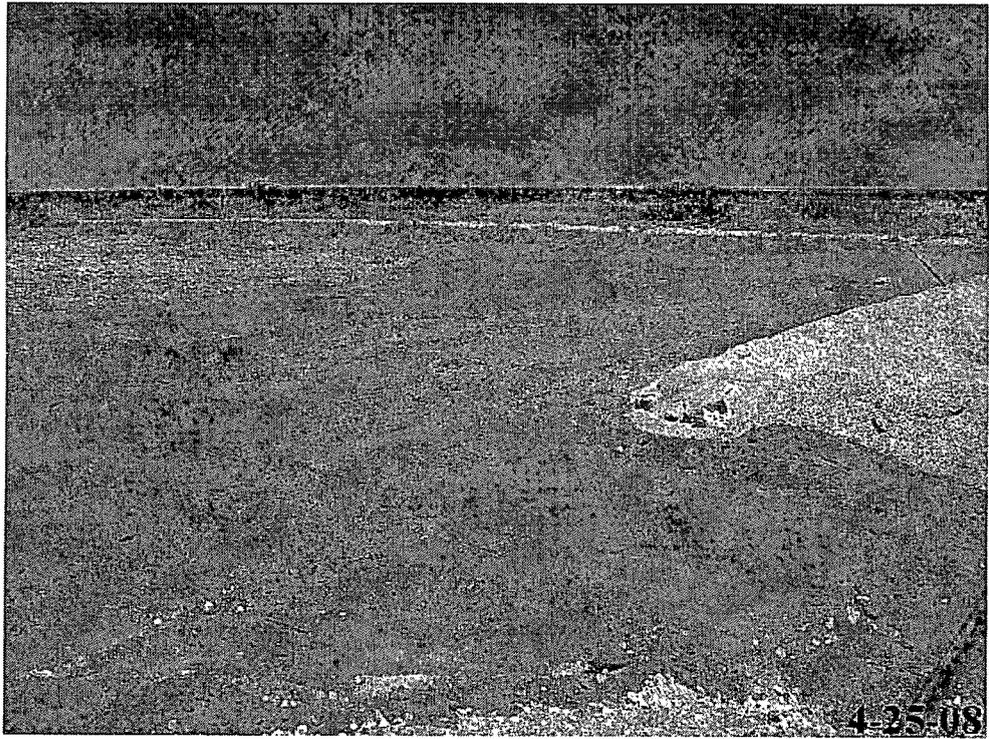
Photograph No. 7 – Looking easterly across excavation area.



Photograph No. 8 – Remediated site.



Photograph No. 9 – Remediated site.



Photograph No. 10 – Remediated site.

**ATTACHMENT II  
LABORATORY ANALYTICAL RESULTS  
AND  
CHAIN-OF-CUSTODY FORMS**



# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

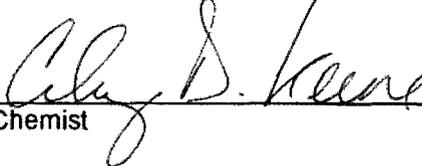
ANALYTICAL RESULTS FOR  
ENVIRONMENTAL PLUS, INC.  
ATTN: DAVID P. DUNCAN  
P.O. BOX 1558  
EUNICE, NM 88231  
FAX TO: (575) 394-2601

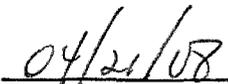
Receiving Date: 04/17/08  
Reporting Date: 04/21/08  
Project Owner: CHESAPEAKE ENERGY (160097A)  
Project Name: KELLER 27 FED. #2  
Project Location: UL-D, SECT. 27, T 23 S, R 34 E

Sampling Date: 04/17/08  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: CK

LAB NUMBER	SAMPLE ID	GRO	DRO
		(C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)
ANALYSIS DATE		04/19/08	04/19/08
H14676-1	NNSW-1 (0.83')	<10.0	<10.0
H14676-2	NSSW-1 (0.83')	<10.0	<10.0
H14676-3	EBTM-1 (1')	<10.0	54.5
H14676-4	EWSW-1 (0.5')	<10.0	263
H14676-5	NESW-1 (0.67')	<10.0	<10.0
H14676-6	NWSW-1 (0.83')	<10.0	<10.0
H14676-7	ENSW-1A (0.5')	<10.0	<10.0
H14676-8	EESW-1A (0.5')	<10.0	<10.0
H14676-9	SSSW-1 (0.5')	<10.0	<10.0
H14676-10	SNSW-1 (0.5')	<10.0	56.3
H14676-11	SESW-1 (0.5')	<10.0	<10.0
H14676-12	SBTM-1 (1')	<10.0	<10.0
H14676-13	SWSW-1 (0.5')	<10.0	<10.0
H14676-14	NBTM-1A (1.83')	<10.0	62.7
Quality Control		223	182
True Value QC		200	200
% Recovery		112	91.0
Relative Percent Difference		7.5	4.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

H14676T EPI

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.







# Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231  
 (575) 394-3481 FAX: (575) 394-2601

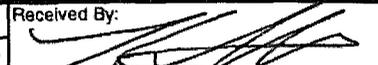
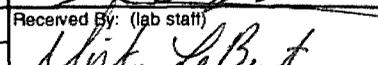
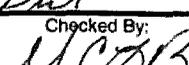
P.O. Box 1558, Eunice, NM 88231

## Chain of Custody Form

LAB: Cardinal

Company Name				Bill To										ANALYSIS REQUEST									
Environmental Plus, Inc.				 <p>Attn: David P. Duncan                  P.O. Box 1558                  Eunice, NM 88231</p>																			
EPI Project Manager																							
David P. Duncan																							
Mailing Address																							
P.O. BOX 1558																							
City, State, Zip																							
Eunice New Mexico 88231																							
EPI Phone#/Fax#																							
575-394-3481 / 575-394-2601																							
Client Company																							
Chesapeake Energy																							
Facility Name																							
Keller 27 Fed. #2																							
Location																							
UL-D, Sect. 27, T 23 S, R 34 E																							
Project Reference																							
160097A																							
EPI Sampler Name																							
Danny Deaton																							
LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING		BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO <sub>4</sub> )	pH	TCLP	OTHER >>>	PAH		
				GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE									TIME	
H14694-1	1 CS-1 (0.5')	G	1			X				X		22-Apr-08	10:00		X								
-2	2 CS-2 (1')	G	1			X				X		22-Apr-08	10:10		X								
-3	3 CS-3 (0.5')	G	1			X				X		22-Apr-08	10:20		X								
-4	4 CS-4 (1')	G	1			X				X		22-Apr-08	10:30		X								
	5																						
	6																						
	7																						
	8																						
	9																						
	10																						

Sampler Relinquished:	04/22/08	Received By:	E-mail results to: dduncan@envplus.net
	Time 0600		NOTE: Please analyze soil samples at your earliest convenience. Thank You
Relinquished by:	04/22/08	Received By: (lab staff)	
	Time 0708		
Delivered by:	Sample Cool & Intact	Checked By:	
	Yes No		

**ATTACHMENT III**  
**INFORMATION AND METRICS FORM**  
**INITIAL NMOCD FORM C-141**  
**FINAL NMOCD FORM C-141**



Information and Metrics

**Incident Date**  
14 April 2008

**NMOCD Notified:**  
15 April 2008

Site: Keller 27 Federal No. 2		Assigned Site Reference : #160097A	
Company: Chesapeake Energy			
Street Address: 1616 West Bender			
Mailing Address: P.O. Box 190			
City, State, Zip: Hobbs, New Mexico 88240			
Representative: Bradley Blevins			
Representative Telephone: (575) 391-1462 ext. 6224			
Telephone:			
Fluid volume released (bbls): 20-bbls		Recovered (bbls): Zero (0)	
>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: Keller 27 Federal No. 2			
Source of contamination: Petroleum products			
Land Owner, i.e., BLM, ST, Fee, Other: BLM			
LSP Dimensions:			
LSP Area: Release Area ~15,220 s.f; Overspray Area ~ 131,260 s.f.			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: N 32° 16' 25.45"			
Longitude: W 103° 27' 35.28"			
Elevation above mean sea level: 3,476 feet			
Feet from South Section Line: 1967'			
Feet from West Section Line: 2055'			
Location- Unit or ¼: NE ¼ of the SW ¼		Unit Letter: K	
Location- Section: 27			
Location- Township: T23S			
Location- Range: R34E			
Surface water body within 1000' radius of site: none			
Domestic water wells within 1000' radius of site: none			
Agricultural water wells within 1000' radius of site: none			
Public water supply wells within 1000' radius of site: none			
Depth from land surface to groundwater (DG): ~253 feet			
Depth of contamination (DC): unknown			
Depth to groundwater (DG - DC = DtGW): <253 feet			
<b>1. Groundwater</b>		<b>2. Wellhead Protection Area</b>	<b>3. Distance to Surface Water Body</b>
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points	<200 horizontal feet: 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	200-1000 horizontal feet: 10 points
If Depth to GW >100 feet: 0 points			>1000 horizontal feet: 0 points
Site Rank (1+2+3) = 0+0+0 = 0			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	>19	10-19	0-9
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87401  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**RECEIVED**

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

APR 22 2008

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

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

**HOBBS OGD**

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

<b>Name of Company:</b> Chesapeake Energy	<b>Contact:</b> Bradley Blevins
<b>Address:</b> P.O. Box 190, Hobbs, NM 88240	<b>Telephone No.:</b> (575) 391-1462 ext. 6224
<b>Facility Name:</b> Keller 27 Federal #2	<b>Facility Type:</b> Production Well

<b>Surface Owner:</b> BLM	<b>Mineral Owner:</b>	<b>Lease No.:</b>
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**LOCATION OF RELEASE**

API 30 025 37906

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	27	23S	34E	1967	FSL	2055	FWL	Lea

**Latitude:** N 32° 16' 25.45" **Longitude:** W 103° 27' 35.28"

**NATURE OF RELEASE**

<b>Type of Release:</b> Petroleum	<b>Volume of Release:</b> 20 bbls	<b>Volume Recovered:</b> none
<b>Source of Release:</b> Casing valve	<b>Date and Hour of Occurrence:</b> 4-14-08 @ 6:30 AM	<b>Date and Hour of Discovery:</b> 4-14-08 @ 6:30 AM
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> Chris Williams, NMOCD - District 1	
<b>By Whom?</b> Bradley Blevins	<b>Date and Hour:</b> 4-15-08 via e-mail @ 8:25 AM	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse:</b> Not Applicable	

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

**Depth to water:** ~253 bgs

**Describe Cause of Problem and Remedial Action Taken.\*** Valve (without attached handle) located on the well head casing was opened by unauthorized individuals creating a possible case of vandalism

**Describe Area Affected and Cleanup Action Taken.\*** Approximately 15,220 s.f. of surface area was inundated by the release of ±20-barrels of petroleum product (no recovery) with ±131,260 s.f. of pasture land receiving overspray mist. Majority of the inundated area was on the production and tank battery caliche pad. Three (3) minor sections of pasture land were affected. An EPI Emergency Response Team excavated and transported approximately 14 c.y. of surface contaminated material to EPI Land Farm for treatment. The overspray area vegetation was mowed to a manageable height by use of a brush hog. This area will receive a 6% solution of *Micro-Blaze*™ to accelerate natural attenuation of surficial TPH contaminants. Three (3) minor sections of pasture land will be excavated to size (depth and width) necessary for remediation. Topsoil will be replaced and area seeded with a blend approved by the BLM. Caliche pad will be excavated a minimum six (6) inches depth and disturbed areas overlain with non-contaminated caliche. Contaminated caliche will be disposed at a State approved facility. Described remediation activities are contingent on NMOCD approval.

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.

<b>Signature:</b>	<b>OIL CONSERVATION DIVISION</b> <i>[Signature]</i>	
<b>Printed Name:</b> Bradley Blevins	<b>Approved by District SUPERVISOR ENVIRONMENTAL ENGINEER</b>	
<b>Title:</b> Field Supervisor	<b>Approval Date:</b> 4-28-08	<b>Expiration Date:</b> 6-28-08
<b>E-mail Address:</b> bblevins@chkenergy.com	<b>Conditions of Approval:</b>	
<b>Date:</b> 4-15-08 <b>Phone:</b> (575) 391-1462 ext. 6224	<b>Attached</b> <input type="checkbox"/> 1 RP# 1846	

\* Attach Additional Sheets If Necessary

PCOHO 812339439

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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

RECEIVED

Form C-141  
Revised October 10, 2003

MAY 23 2008

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

HOBBS OCD

Release Notification and Corrective Action

OPERATOR

Initial Report  Final Report

Name of Company: Chesapeake Energy	Contact: Bradley Blevins
Address: P.O. Box 190, Hobbs, NM 88240	Telephone No.: (575) 391-1462 ext. 6224
Facility Name: Keller 27 Federal #2	Facility Type: Production Well

Surface Owner: BLM	Mineral Owner:	API No.: 30-025-37906
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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
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By Whom? Bradley Blevins	Date and Hour: 4-15-08 via e-mail @ 8:25 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: Not Applicable	

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

Depth to water: ~253 bgs

Describe Cause of Problem and Remedial Action Taken.\* Valve on well head casing opened by unauthorized individuals (possible vandalism).

Describe Area Affected and Cleanup Action Taken.\* Approximately 15,220-ft<sup>2</sup> of surface area was inundated by the release with 131,000-ft<sup>2</sup> of pasture land receiving overspray mist. The overspray area vegetation was mowed to a manageable height utilizing a brush hog. The area was sprayed with a 6% solution of *Micro-Blaze*<sup>TM</sup> to accelerate natural attenuation of surficial TPH contaminants. From April 14, 2008 through April 21, 2007, approximately 676 yds<sup>3</sup> of impacted material were excavated from a combined surface area of ±17,525-ft<sup>2</sup> at depths ranging from 0.5- to 1.83-foot bgs. Impacted soil was transported to EPI and Pitchfork Landfarms for treatment. During excavation activities, soil samples were collected from sidewalls and bottom at varying depths for field analyses and confirmatory laboratory analytical results. Upon satisfactory laboratory analytical results confirming TPH constituents were below NMOCD remedial threshold standards, the excavation located on the caliche production pad was backfilled with clean caliche (~462 yds<sup>3</sup>) on April 23, 2008. Backfilling activities continued through April 25, 2008 with excavated areas outside the caliche production pad filled with native topsoil (154 yds<sup>3</sup>). Both caliche and topsoil material were transported to the site from a private pit. Disturbed areas within the caliche production pad were contoured to allow vehicular traffic and promote controlled natural drainage. Contiguous areas outside the caliche production pad were similarly contoured to allow natural drainage and will be disked and seeded with a blend preferred by the BLM.

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: <i>Bradley Blevins</i>	OIL CONSERVATION DIVISION	
Printed Name: Bradley Blevins	Approved by District Supervisor: <i>[Signature]</i>	
Title: Field Supervisor	Approval Date: 5.23.08	Expiration Date: _____
E-mail Address: bblevins@chkenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 5-21-08 Phone: (575) 391-1462 ext. 6224	_____	IRP-1816

\* Attach Additional Sheets If Necessary