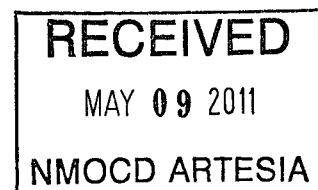
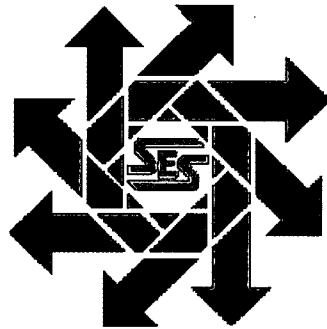


**RKI Exploration & Production, LLC.  
RDX Federal 21-13  
Township 26 South, Range 30 East, Section 21  
Eddy County, New Mexico**

**Sampling Report**

**May 5, 2011**



**Prepared for:**

***RKI Exploration & Production, LLC.  
PO Box 370  
Carlsbad, New Mexico 88221-0370***

**Prepared by:**

***Safety & Environmental Solutions, Inc.  
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**I. Company Contacts**

Representative	Company	Telephone	E-mail
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**II. Background**

Safety and Environmental Solutions, Inc. (SESI) was engaged by RKI Exploration & Production, LLC. (RKI E&P LLC) to sample a release area located at the RDX Federal 21-13 in Unit B of Section 21 Township 26 South, Range 30 East, Eddy County, New Mexico.

**III. Surface and Ground Water**

The closest groundwater of record with the Office of the State Engineer is located 2.5 miles northwest of the location; in the Section 24 of Township 26 South and Range 30 East, Lea County New Mexico. The depth of water in this well was 184' in November 1987.

**IV. Characterization**

The target cleanup levels are reached by the application of the "Guidelines for Remediation of Leaks, Spills and Releases New Mexico Oil Conservation Division (NMOCD) – August 13, 1993 to this site is 5,000 parts per million (ppm) Total Petroleum Hydrocarbons (TPH).

Application of the New Mexico Oil Conservation Division's ranking criteria for contaminated soils at this site is presented below:

Total Ranking Score			
Score:	>19	10 - 19	0 - 9
Benzene (ppm)	10	10	10
Total BTEX (ppm)	50	50	50
TPH (ppm)	100	1,000	5,000

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	
	>100 feet	0 points	X
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	X
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	X
<b>RANKING SCORE (TOTAL POINTS)</b>			<b>0</b>

## **V. Work Performed**

On April 29, 2011, SESI was onsite with Mr. Lonnie Catt, representative for RKI E&P LLC. to obtain samples from release area. The release area was previously excavated to depths ranging from one (1) ft. below ground surface (bgs) to four (4) ft. bgs. Twelve (12) samples were randomly obtained approximately every 100 yards throughout the release area. Samples were retrieved at depths ranging from one (1) to two (2) ft. bgs and were properly preserved and transported under chain of custody to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for Chlorides (EPA Method 4500B), Total Petroleum Hydrocarbons (TPH EPA Method 418.1), Benzene, Toluene, Ethyl Benzene, and Total Xylenes (BTEX EPA Method 8021B).

The results of the analysis are as follows:

Sample ID	Chlorides (mg/kg)	TPH 418.1 (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)
Analysis Date	5/3/11	5/5/11	5/3/11	5/3/11	5/3/11	5/3/11
SP #1 2' bgs	6,320	<100	<0.050	<0.050	<0.050	<0.150
SP #2 1' bgs	240	<100	<0.050	<0.050	<0.050	<0.150
SP #3 1' bgs	10,800	<100	<0.050	<0.050	<0.050	<0.150
SP #4 1' bgs	7,700	488	<0.050	<0.050	<0.050	<0.150
SP #5 1' bgs	16.0	<100	<0.050	<0.050	<0.050	<0.150
SP #6 2' bgs	1,850	134	<0.050	<0.050	<0.050	<0.150
SP #7 2' bgs	<16.0	<100	<0.050	<0.050	<0.050	<0.150
SP #8 3' bgs	224	1,050	<0.050	<0.050	<0.050	<0.150
SP #9 1' bgs	6,800	114	<0.050	<0.050	<0.050	<0.150
SP #10 2' bgs	3,400	<100	<0.050	<0.050	<0.050	<0.150
SP #11 2' bgs	32.0	<100	<0.050	<0.050	<0.050	<0.150
SP #12 1' bgs	7,920	<100	<0.050	<0.050	<0.050	<0.150

## **VI. Figures & Appendices**

Figure 1 – Vicinity Map

Figure 2 – Site Map

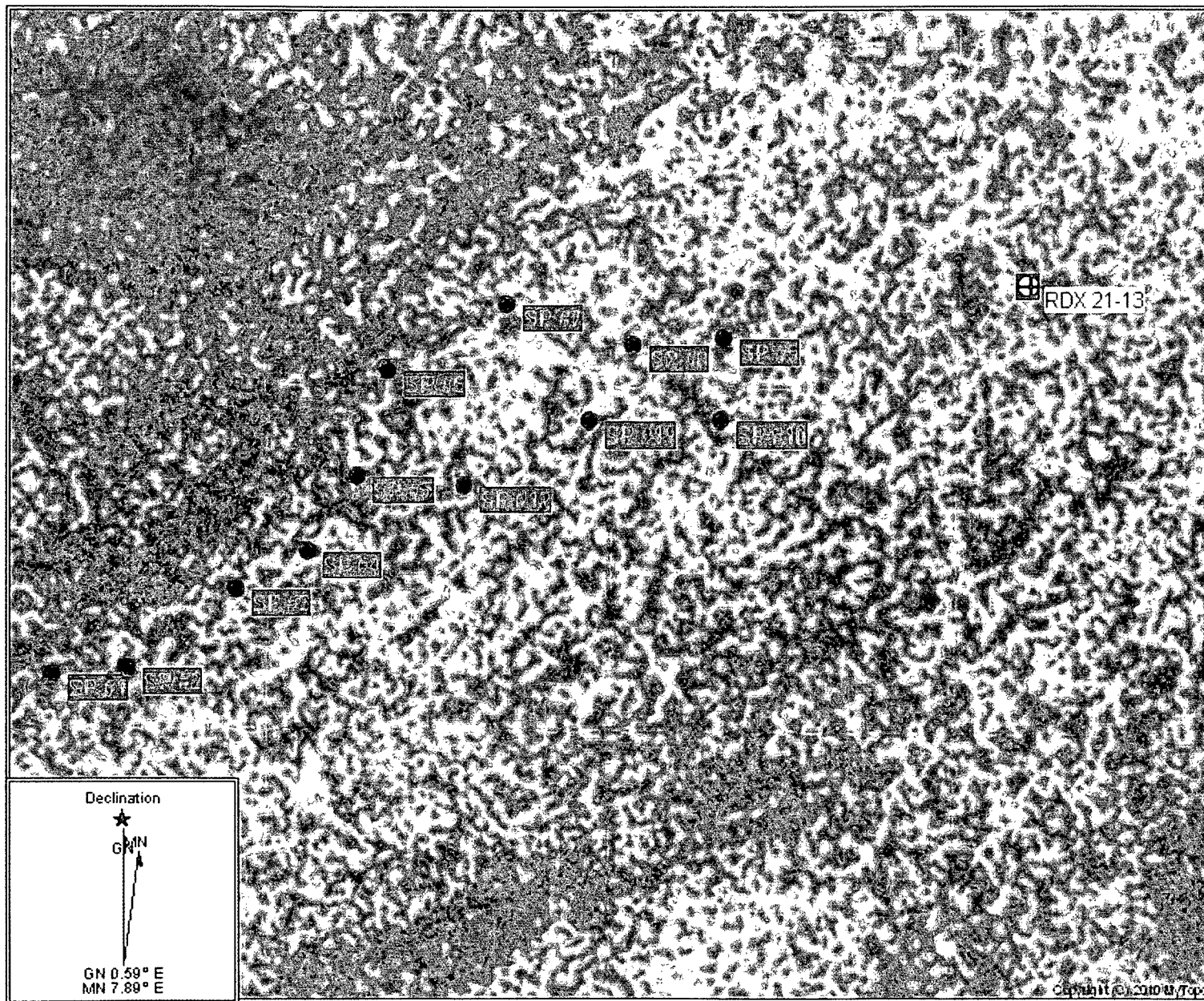
Appendix A – Analytical Results

Appendix B – Site Photographs

**Figure 1**  
**Vicinity Map**



**Figure 2**  
**Site Map**



Map Name: ROSS RANCH SE, NM TX  
Scale: 1 inch = 150 ft.

Map Center: 032° 01' 59.82" N 103° 53' 09.25" W  
Horizontal Datum: WGS84

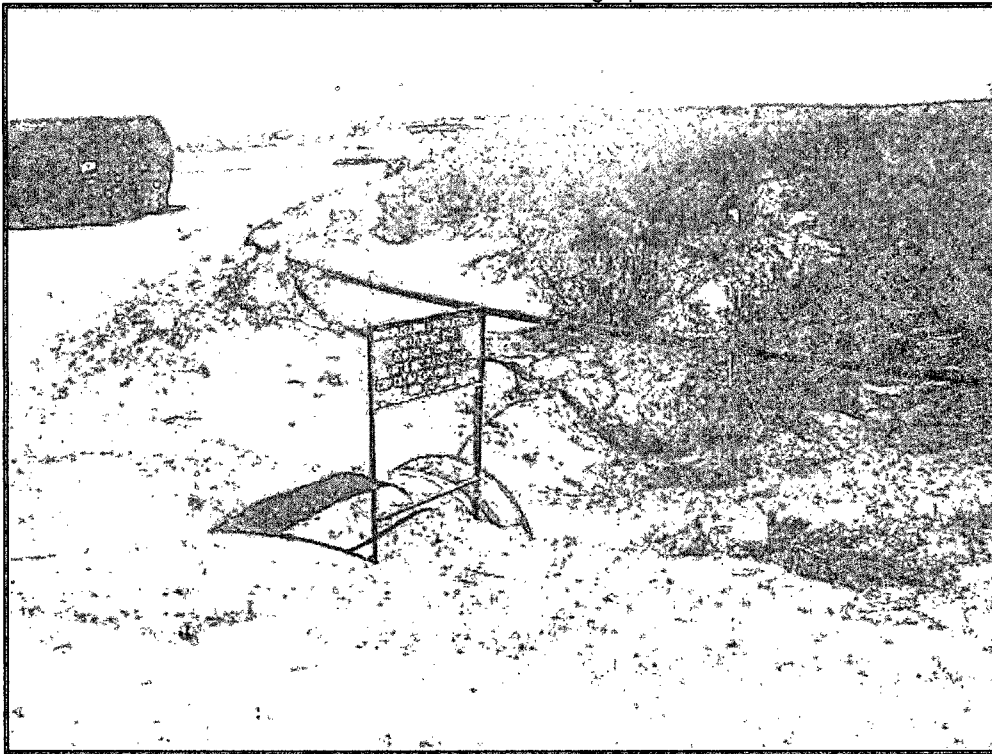


## **Appendix A**

### **Analytical Results**

## **Appendix B**

### **Site Photographs**



Well sign



Excavated area facing north



Excavated area facing north



Excavated area facing northeast



Excavated area facing northeast



Excavated area facing northeast



Excavated area facing east



Excavated area facing east



Excavated area facing east



Excavated area facing south

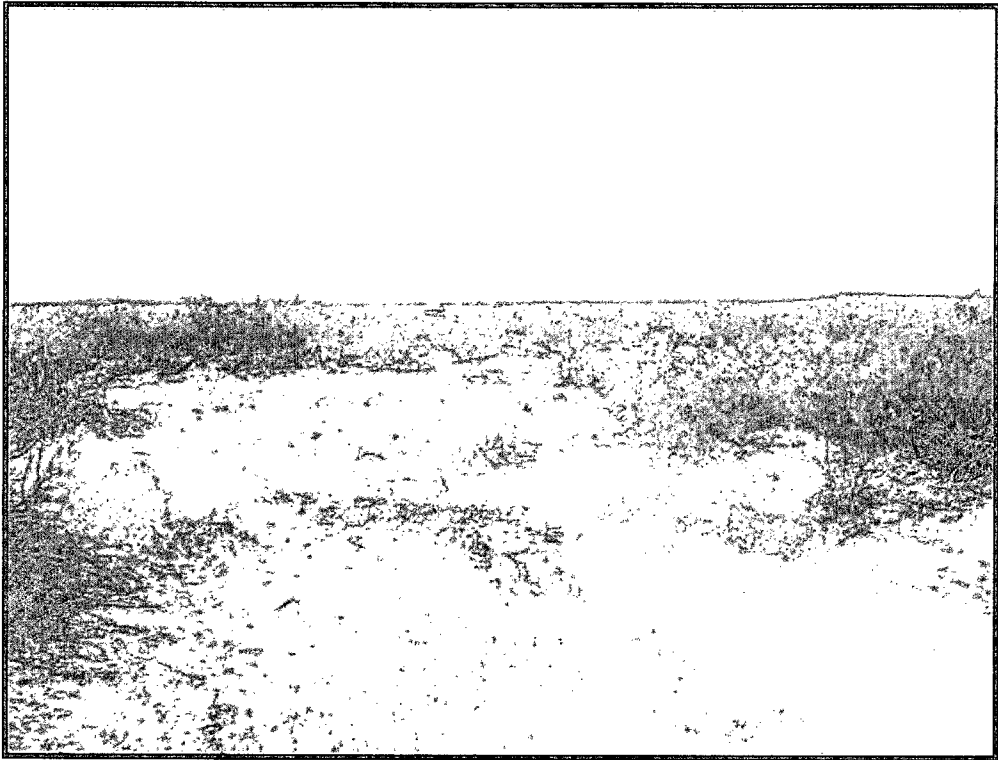




Excavated area facing south



Excavated area facing south



Excavated area facing southwest



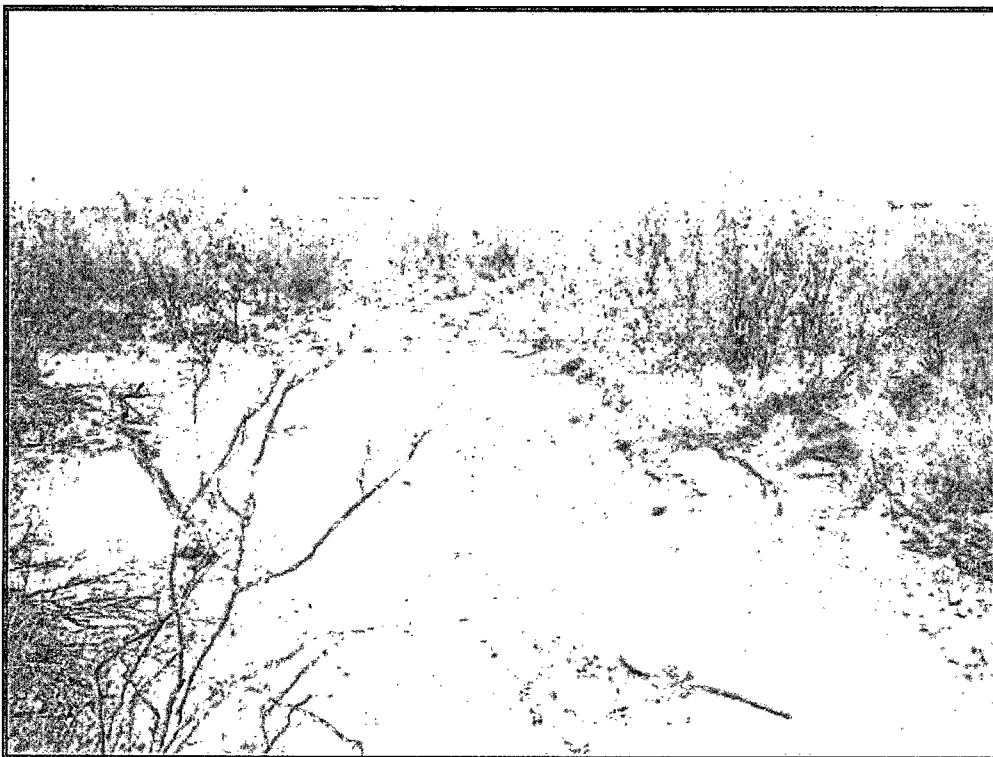
Excavated area facing southwest



Excavated area facing west



Excavated area facing west



Excavated area facing west