pGRL0921750959

CrownQuest Operating, LLC

Site Remediation Summary

Federal 20 #5

1RP-2252

API 30-025-28238

Lea County, New Mexico

UL. K, Sec. 20, T13S, R33E

GPS N33.13603 W103.64478

Start Date: 9Aug10

Finish Date: 25Aug10

Prepared By: Vernon K. Black

Environmental Technician

Hungry Horse, LLC

PO Box 1058

Hobbs, NM 88241

(575)-393-3386

Table of Contents

Attachments

1.0 Introduction

This report addresses the site remediation conducted at CrownQuest Operating LLC, NM Federal 20 #5. A general scope of work performed, analytical results and overhead maps are included in this document as attachments. The project manager for Hungry Horse, LLC was Vernon K. Black.

2.0 Area Description

The top three to five feet of soil is topsoil. Below this layer, the formation begins to turn into a more of a caliche/caliche rock base. Vegetation in this area consists of native desert grasses and small yucca plants. The affected area is used for grazing livestock. This location is in Lea County, NM northwest of Lovington, NM. The depth to the ground water is 133' based upon information on the NM Office of the State Engineer's web site. There are no water wells or surface bodies of water within a half of a mile of this location. Based upon this groundwater information, this site is given a site ranking score of "0" by the NM OCD.

3.0 Site Remediation Process

The affected area was remediated as per the approved and amended work plan submitted to NM OCD. The existing monitor well was plugged according to the standards set forth by the NM Office of the State Engineer. The affected area, approximately 235' x 125', was then excavated to a depth of 4' BGS (below ground surface). A synthetic liner was then placed in the bottom of the excavation. Prior to backfilling, a 6" protective layer of sand was placed on top of the liner. Backfilling with clean material from a nearby source commenced with approximately 1.5' of caliche being placed on top of the sand with the remainder of the back fill being topsoil. The area was then contoured to match the surrounding terrain and seeded with a custom blend of seed.
All excavated material was transported to a division approved facility for disposal.

Web Images Videos Maps News Shopping Gmail more ▾ Help | Sign in

Google maps [ ] Search Maps Show search options

Find businesses, addresses and places of interest. Learn more

The route has been modified. Undo

Print · Send · Link

Get Directions · My Maps

Ⓐ 33.053719, -103.602396

Ⓑ 33.135278, -103.645833

Add Destination · Show options

By car | Get Directions

Driving directions to Unknown road

8.4 mi – about 18 mins

Via NM-457 N - remove

Ⓐ NM-457 N

1. Head north on NM-457 N — 6.2 mi
2. Turn left at Co Rd 159/Priscilla Rd — 1.4 mi
3. Turn left — 0.4 mi
4. Turn left — 0.3 mi

Ⓑ Unknown road

Save to My Maps

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2009 Google

Report a problem

Traffic | More... | Map | Satellite | Terrain

Approx. Spill Site

Versada Plant

457

Co Road 159

Co Road 158A

Co Road 158

Anderson Rd

Co road 158

Co Road 157

Co road 157

1 mi

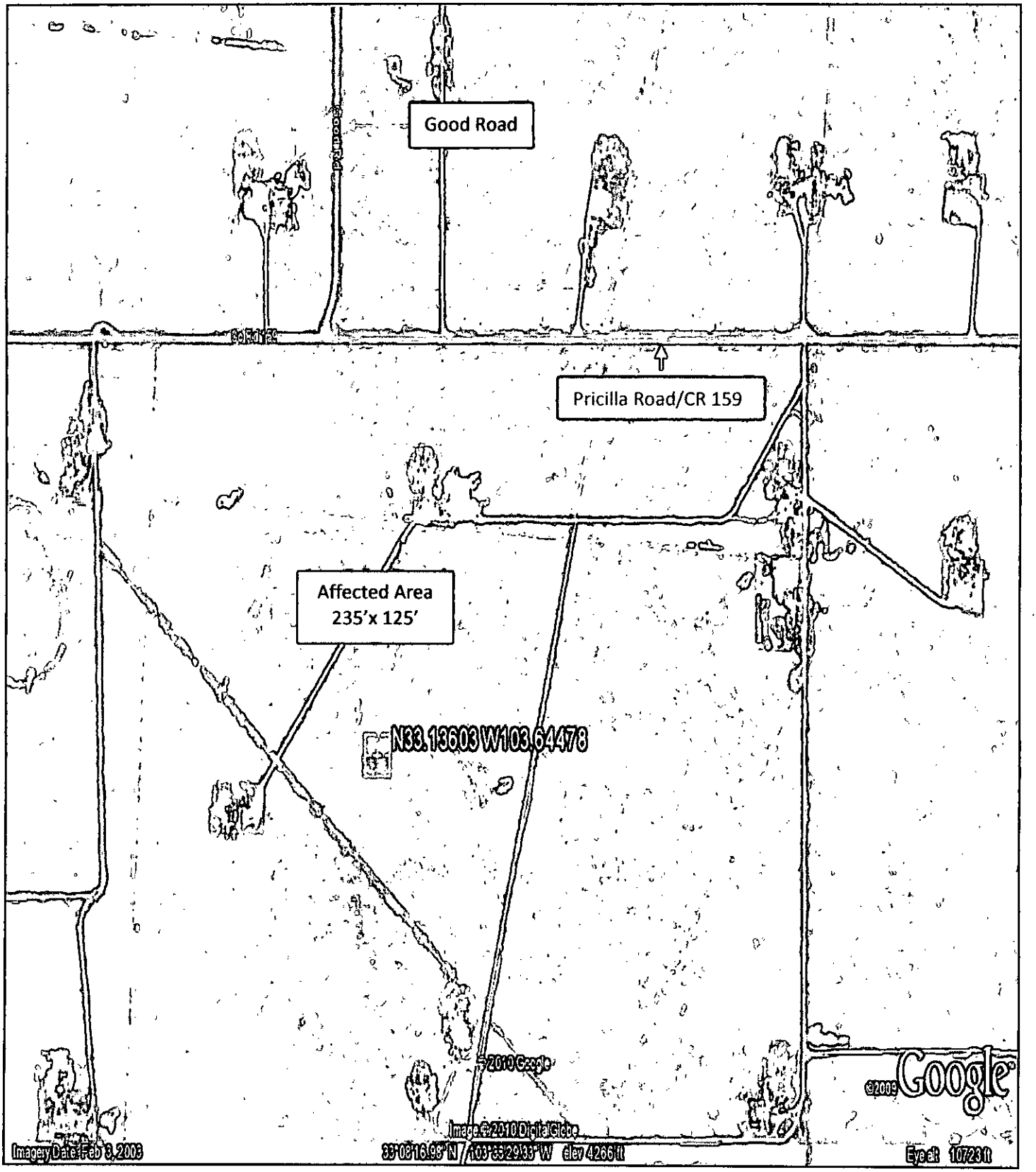
2 km

©2009 Google - Map data ©2009 Google - Report a problem

Done

NUM

Attachment 1


Good Road
Pricilla Road/CR 159
Affected Area
235'x 125'
N33.13603 W103.64478
©2009 Google
Imagery Date: Feb 3, 2008
33°08'16.98" N 103°39'29.33" W elev 4266 ft
Eye alt 10723 ft

Attachment 2

Table 1

CONCENTRATIONS OF BTEX,TPH AND CHLORIDE IN SOIL
CROWNQUEST OPERATING, LLC
NEW MEXICO STATE 20 #5
LEA COUNTY, NEW MEXICO
NMOCD REF #1RP- 2252

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					EPA SW 846-8015			EPA 4500 / E 300
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	XYLENE (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TOTAL TPH (mg/Kg)	Chloride (mg/Kg)
09/24/09	SB-1 @ 5'	5 Feet	In-Situ	<0.0100	0.0199	0.0556	0.201	0.2765	12.6	<50.0	12.6	**11,000**
09/24/09	SB-1 @ 15'	15 Feet	In-Situ	<0.0100	<0.0100	<0.0100	0.075	0.075	6.23	<50.0	6.23	**2,760**
09/24/09	SB-1 @ 25'	25 Feet	In-Situ	-	-	-	-	-	-	-	-	79
09/24/09	SB-1 @ 30'	30 Feet	In-Situ	-	-	-	-	-	-	-	-	87.9
09/29/09	MW-1 @ 5'	5 Feet	In-Situ	<0.0100	<0.0100	<0.0100	0.0374	0.0374	4.05	<50.0	4.05	**4,660**
09/29/09	MW-1 @ 15'	15 Feet	In-Situ	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	1.6	<50.0	1.6	**3,600**
09/29/09	MW-1 @ 25'	25 Feet	In-Situ	-	-	-	-	-	-	-	-	**4,740**
09/29/09	MW-1 @ 35'	35 Feet	In-Situ	-	-	-	-	-	-	-	-	**5,320**
09/29/09	MW-1 @ 45'	45 Feet	In-Situ	-	-	-	-	-	-	-	-	**4,610**
09/29/09	MW-1 @ 55'	55 Feet	In-Situ	-	-	-	-	-	-	-	-	**4,250**
09/29/09	MW-1 @ 65'	65 Feet	In-Situ	-	-	-	-	-	-	-	-	**4,670**
09/29/09	MW-1 @ 75'	75 Feet	In-Situ	-	-	-	-	-	-	-	-	**5,100**
09/29/09	MW-1 @ 85'	85 Feet	In-Situ	-	-	-	-	-	-	-	-	**667**
09/29/09	MW-1 @ 95'	95 Feet	In-Situ	-	-	-	-	-	-	-	-	**422**
09/29/09	MW-1 @ 105'	105 Feet	In-Situ	-	-	-	-	-	-	-	-	200
09/29/09	MW-1 @ 115'	115 Feet	In-Situ	-	-	-	-	-	-	-	-	46.6
09/29/09	MW-1 @ 120'	120 Feet	In-Situ	-	-	-	-	-	-	-	-	255
09/29/09	MW-1 @ 125'	125 Feet	In-Situ	-	-	-	-	-	-	-	-	**287**
NMOCD CLEAN-UP LEVEL				**10**				**50**			**5,000**	**250**

BOLD indicates concentration exceeding NMOCD regulatory standards

Attachment 3

New Mexico One Call
Locate Request Confirmation

Header Code: STANDARD LOCATE
Request Type:

Ticket No: 2010322175 Seq. No: 0
Update of:
Original Call Date: 08/05/2010 Time: 07:10:26 AM OP: 190
Transmit Date: 08/05/2010 Time: 07:15:26 AM
Work to Begin Date: 08/09/2010 Time: 07:10:00 AM

Company: HUNGRY HORSE LLC
Contact Name: VERNON BLACK
Contact Phone: (575)631-2253
Alternate Contact:
Alternate Phone:
Best Time to Call:
Fax No: (575)391-4585
Cell Phone:
Pager No:
Email:

State: NM County: LEA City: RURAL LEA
Address: , FLOW LINE LEASE/ WELL NEW MEXICO STATE 2
To Address:
Nearest Intersecting Street:
2nd Intersecting Street:
Subdivision:
Latitude: 33.13717300 Longitude: -103.64908150
Zip Code:
Grid:
Township: 14S Range: 33E Section 1/4: 06 NE

Location of Work: FROM LOVINGTON, GO W. ON US-82, TRN N. ON NM-457
GO TO JUST PAST MM-15, L. ON PRICILLA RD (CR-159)
GO 1.3MI, L. ON LEASE ROAD, THEN IMMEDIATE R. ON
2-TRACK ROAD GO APPX 0.25MI TO A DIRT PILE.
SPOT THE AREA MARKED WITH PINK PIN-FLAGS.
Remarks: -OPEN ACCESS-

Type of Work: SOIL REMEDIATION
Private Property: Street: Overhead Lines: Blasting:
Easement: Mechanical Boring: Premarked: Y
Work Being Done For: CROWN QUEST OPERATING
The following utility owners have been notified:
SPHB SAUN

IMPORTANT CONFIRMATION NOTICE

Your fax request has been received and processed. It is your responsibility to review the information provided on this faxback confirmation ticket and ensure it has been correctly interpreted from your request. Notify us immediately of any corrections or errors. Acceptance of this faxback confirmation ticket means you accept responsibility for the accuracy of the information contained in the ticket and you agree to indemnify New Mexico One Call Systems, Inc. of all liability, claims, fees, or damages, including reasonable attorney fees arising from or resulting from the use of the information provided on this confirmation ticket.

New Mexico Law requires you to wait two working days from the date and time of this confirmation notice before you begin excavation. This request is valid for ten working days. Only the facility owners listed on this ticket will be notified.
You can check the Locate Status of this ticket and request other tickets by visiting the our website at www.nmonecall.org.

Attachment 4

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 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 10, 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 CrownQuest Operating, LLC	Contact Kent Crabtree
Address PO Box 53310 Midland, Texas 79710	Telephone No. 432-556-0770
Facility Name **New Mexico State 20 #5**	Facility Type Poly Flow line

Surface Owner Norman Hahn	Mineral Owner	Lease No. 30-025-28238

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	6	14S	33E					Lea

Latitude 33 08' 07" North **Longitude** 103 38' 45" West

NATURE OF RELEASE

Type of Release Produced Water/Crude Oil	Volume of Release 50 Barrels	Volume Recovered 25 Barrels
Source of Release Poly Flow line	Date and Hour of Occurrence 7/21/09 @0900	Date and Hour of Discovery 7/21/09 @ 0915
Was Immediate Notice Given? ☒ Yes ☐ No Not Required	If YES, To Whom? Maxie Brown	
By Whom? Eb Taylor	Date and Hour 7/21/09 @ 1126	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* GW @ 130'

Describe Cause of Problem and Remedial Action Taken: Poly flow line separated at the seam, resulting in a release of crude oil. Flow line was repaired.

Describe Area Affected and Cleanup Action Taken. Release impacted an area measuring approximately 100 feet by 60 feet. Impacted soil will be remediated as per NMOCD guidelines.

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: Ronald G Snow Jr Ronald G Snow Jr	**OIL CONSERVATION DIVISION**
Printed Name: Kent Crabtree Ronald G Snow Jr	Approved by ~~District Supervisor~~ ENV ENGINEER: Geoffrey Leking
Title: Foreman	Approval Date: 08/05/09 Expiration Date: 10/05/09
E-mail Address: kcrabtree@crownquest.com	Conditions of Approval: DELINEATE TO CLEAN +1, SUBMIT FINAL C-141 BY IRP-09.8.2252
Date: 7/30/09 Phone: 432-556-0770	

RECEIVED
AUG 05 2009
HOBBSOCD

fGRL0921749052

EXTENDED TO 08/23/10

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 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

RECEIVED
SEP 07 2010
HOBBSOCD

Form C-141
Revised October 10, 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 X Final Report

Name of Company CrownQuest Operating, LLC	Contact Don Rogers
Address PO Box 53310 Midland, TX 79710	Telephone No. 432 818 0300
Facility Name NM Federal 20 #5	Facility Type Oil Well

Surface Owner Norman Hahn	Mineral Owner	Lease No. 30-025-28238

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	6	14S	33E					Lea

Latitude N33.13603 **Longitude** W103.64478

NATURE OF RELEASE

Type of Release Produced Water/Crude Oil	Volume of Release 50 bbls	Volume Recovered 25 bbls
Source of Release poly Flow Line	Date and Hour of Occurrence 21July09 0900hrs	Date and Hour of Discovery 21Jult09 0915hrs
Was Immediate Notice Given? X Yes ☐ No ☐ Not Required	If YES, To Whom? Maxie Brown NM OCD Dist 1	
By Whom? Eb Taylor	Date and Hour 21July09 1126hrs	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*
A poly flow line separated at the seam. Emergency actions resulted in the excavation to a depth of approximately 1' BGS and stockpiling of the material on a synthetic liner.

Describe Area Affected and Cleanup Action Taken.*
The affected area, approximately, 235' x 125', was excavated to a depth of 4' BGS. A synthetic liner (barrier) was placed in the bottom of the excavation. A 6" protective layer of sand was placed on top of the liner with the remainder of the back fill being caliche and topsoil. The area was contoured and seeded with a custom blend of seed.

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: Don Rogers	Approved by ~~District Supervisor:~~ ENV ENGINEER: Geoffrey Leking	
Title: Manager, Special Projects	Approval Date: 09/07/10	Expiration Date: —
E-mail Address: drogers@crownquest.com	Conditions of Approval:	IRP-2252
Date: 25Aug10 Phone: 432 818 0300		

* Attach Additional Sheets If Necessary

Attachment 5

HUNGRY HORSE, LLC
ENVIRONMENTAL SERVICES

Dirt Work * On-Site Remediation * Soil Testing * Excavation

6Aug10

RECEIVED
AUG 09 2010
HOBBSOCD

To: Geoffery Leking, NM OCD Dist 1
Don Rogers, CrownQuest Operating, LLC
Reference: Remediation Work Plan
Operator: CrownQuest Operating, LLC
Location: NM State 20 #5
Legals: Ul. H, Sec. 6, T 14S, R33E, Lea County, NM
NM OCD reference: 1RP 09-8-2252

Dear Geoffery Leking,

I am submitting this remediation wok plan on behalf of CrownQuest Operating, LLC based upon the following information.

Historical Information for Site

On 29July09, a release from a poly flow line was discovered and reported to NM OCD. Reported information on the submitted C 141 show approximately 50bbls was released with 25bbls recovered. The affected area is approximately 100' X60'.

NM Office of State Engineer Office reports depth to ground water is 133'. There are no known water wells and no know surface bodies of water within 1,000' of this site. Thus, a ranking score of "0" is assigned to this site.

Initial response to this release by a third part resulted in an excavation of affected topsoil to a depth of approximately 1'BGS. The excavated material was stockpiled on site on a synthetic liner to prevent leeching of contaminants.

Soil samples were obtained through soil boring, by a third party, at 5' intervals and analyzed for chloride content. Lab analysis is on file at NM OCD under 1RP 09-8-2252. This soil boring was converted to a groundwater monitor well and is still in place.

Remediation Proposal

I propose the following remediation plan for this affected area based upon the initial response activities at the site and the available analytical on file that was provide after the initial response.

P. O. Box 1058 * Hobbs New Mexico * Office 505.393.3386 * Fax 505.391.4585

1) Plug and abandon the existing monitor well per guidelines set forth by New Mexico Office of the State Engineer.
2) Excavate the affected area to a depth of 4' BGS. Side walls of the excavation will be sampled and field tested to determine the outward migration of chlorides. Once field test indicate the out ward migration has been mitigated and the 4'BGS depth has been reached, excavation will stop. All contaminated material will be hauled to a division approved facility for disposal.
3) Line the excavated area with a 20 mil synthetic liner. The liner will be placed on a 6" bed of sand with a 6" bed of sand on top of the liner to aid in protecting the liner during backfill. Backfill of non-impacted soil obtained from a nearby source will be used; the area will contoured to match the surrounding terrain and seeded.

Sincerely,

Vernon K. Black
Hungry Horse, LLC
Hobbs, NM
575 631 2253 cell
575 393 3386

Approved.
Geoff Leking
Env. Engineer
NMOCD-Hobbs
08/09/10

HUNGRY HORSE, LLC
ENVIRONMENTAL SERVICES

Dirt Work * On-Site Remediation * Soil Testing * Excavation

11Aug10

To: Geoff Leking, NM OCD Dist 1
Don Rogers, CrownQuest Operating, LLC
Reference: Amendment to Remediation Work Plan
Operator: CrownQuest Operating, LLC
Location: NM State 20 #5
Legals: UL. H, Sec. 6, T14S, R33E, Lea County, NM
NM OCD Reference: 1RP 09-8-2252

RECEIVED
AUG 11 2010
HOBBSOCD

Dear Geoff Leking,

I am submitting this amendment to the remediation work plan submitted on 9Aug10, for you review and input. Based upon the excavation at the site for the past two days, the layer of topsoil exceeds the depth, 4' BGS, in which we are excavating. Due to this fact and the lack of a presence of rocks, I am requesting a waiver on the placement of a 6" layer of sand in the bottom of the excavation below the synthetic liner. The topsoil still present in the bottom of the excavation will provide adequate protection for the synthetic liner. A layer of sand will still be placed on top of the liner as a source of protection from the backfill and backfill process.

Sincerely,

Hungry Horse, LLC

approved by:
Jeff Leking
Environmental Engineer
NMOCD-Hobbs
08/11/10

*P. O. Box 1058 * Hobbs New Mexico * Office 505.393.3386 * Fax 505.391.4585*

Attachment 6